COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
NORTHERN REGIONAL OFFICE
13901 Crown Court, Woodbridge, Virginia 22193
(703) 583-3800
www.deq.virginia.gov

Matthew J. Strickler
Secretary of Natural Resources

David K. Paylor
Director

Thomas A. Faha
Regional Director

December 7, 2018

Mr. D. Richard Beam
Senior Vice President – Power Supply
Old Dominion Electric Cooperative
4201 Dominion Boulevard
Glen Allen, VA 23060

Location: Louisa County
Registration No.: 40989

Dear Mr. Beam:

Attached is a Significant Modification to the Article 3 Federal Operating Permit (FOP) to operate your Louisa Generation Facility pursuant to 9 VAC 5 Chapter 80 of the Virginia Regulations for the Control and Abatement of Air Pollution. This permit supersedes your permit dated January 1, 2016.

This permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and civil penalty. Please read all conditions carefully.

This approval to operate does not relieve Old Dominion Electric Cooperative of the responsibility to comply with all other local, state, and federal permit regulations.

Issuance of this permit is a case decision. The Regulations, at 9 VAC 5-170-200, provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this permit is mailed or delivered to you. Please consult that and other relevant provisions for additional requirements for such requests.

Additionally, as provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal to court by filing a Notice of Appeal with:

Mr. David K. Paylor, Director
Department of Environmental Quality
P. O. Box 1105
Richmond, VA 23218-1105

In the event that you receive this permit by mail, three days are added to the period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for additional information including filing dates and the required content of the Notice of Appeal.

If you have any questions concerning this permit, please contact K. Dean Gossett at (703) 583-3926 or by e-mail at kevin.gossett@deq.virginia.gov.

Sincerely,

James B. LaFratta
Regional Air Permit Manager

TAF/JBL/40989 Title V Permit Cover Letter (12-07-2018)

Attachment: Permit

cc: L. Davis Phaup III, Old Dominion Electric Cooperative (pdf copy)
Director, OAPP (electronic file submission)
Manager, Data Analysis (electronic file submission)
Chief, Air Enforcement Branch (3AP13), U.S. EPA, Region III (pdf copy)
Manager/Inspector, Air Compliance (electronic file submission)

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Article 3
Federal Operating Permit

This permit is based upon Federal Clean Air Act acid rain permitting requirements of Title IV, federal operating permit requirements of Title V; and Chapter 80, Article 3 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, 9 VAC 5-80-360 through 9 VAC 5-80-700, of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:	Old Dominion Electric Cooperative
Facility Name: Facility Location:	ODEC – Louisa Generation Facility 3352 Klockner Road Gordonsville, VA 22942
Registration Number: Permit Number:	40989 NRO-40989

January 1, 2016
Effective Date

December 7, 2018
Modification Date

December 31, 2020
Expiration Date

Thomas A. Faha
Regional Director

December 7, 2018
Signature Date

Permit consists of 52 pages
Permit Conditions 1 to 117
Attachments A & B

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Facility Information

Permittee Information
Old Dominion Electric Cooperative
4201 Dominion Boulevard
Glen Allen, VA 23060

Responsible Official
L. Davis Phaup, III
Director, Environmental, Health and Safety

Acid Rain Designated Representative and Cross-State Air Pollution Rule (CSAPR) Authorized Account Representative
Same as 'Responsible Official'
EPA ID Number: 601174

Alternate Acid Rain and CSAPR Designated Representative
Alvin D. Vaughan
Environmental, Health and Safety Specialist
EPA ID Number: 602308

Facility ID
ODEC – Louisa Generation Facility
3352 Klockner Road
Gordonsville, Virginia 22942

Facility Contact Person
Same as 'Responsible Official'
EPA ID Number: 601174

County-Plant Identification Number: 51-109-00050

ORIS Code: 7837

Facility Description: SIC Code - 4911 and NAICS ID Code 221112

The Louisa Generation Facility, located in Louisa County, Virginia, is a nominal 600 megawatt (MW) peaking power station consisting of five (5) three simple-cycle, dual fuel combustion turbines (CT). Four of the units are General Electric (GE) Model PG7121 EA, each with a rated heat input capacity of 901 MMBtu/hr when combusting natural gas and 967 MMBtu/hr when combusting No. 2 fuel oil, and a base load of electrical power generating capacity of approximately 102 MW. The fifth unit is a GE Model PG7241S-FA CTs, with a rated heat input capacity of 1624 MMBtu/hr when firing on natural gas and 1820 MMBtu/hr when operating on fuel oil, and a base load of electrical power generating capacity of approximately 190 megawatts (MW). Additional equipment consists of two natural gas pipeline heaters, each rated at 9.948 MMBtu/hr, one 2.59 MMBtu/hr diesel driven emergency fire pump and two 1,000,000 gallon distillate fuel oil storage tanks.

Emission Units

Equipment[1] to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity[1]	Pollution Control Device (PCD) Description	PCD ID[2]	Pollutant Controlled	Applicable Permit Date[3]
Fuel Burning Equipment							
EU 1 - EU 4	S-1 thru S-4	Four (4) GE Model PG7121 (EA) simple cycle, dual fuel, combustion turbines	901 MMBtu/hr[4] (heat input when combusting natural gas) (each unit) 967 MMBtu/hr[4] (heat input when combusting No. 2 distillate fuel oil) (each unit)	When firing natural gas – dry low NOx burners (each unit) When firing distillate fuel oil – water injection (each unit)	CD-1 CD-2	NOx	Minor NSR 8/24/18 and Acid Rain 4/19/02
EU 5	S-5	One (1) GE Model PG7241S (FA) simple cycle, dual fuel, combustion turbine	1,624 MMBtu/hr[4] (heat input when combusting natural gas) 1,820 MMBtu/hr[4] (heat input when combusting No. 2 distillate fuel oil)	When firing natural gas – dry low NOx burners When firing distillate fuel oil – water injection	CD-1 CD-2	NOx	Minor NSR 8/24/18 And Acid Rain 4/19/02
EU 6 and EU 7	S-6 and S-7	Two (2) natural gas fuel pipeline heaters	9.948 MMBtu/hr (heat input) (each unit)	None	N/A	N/A	Minor NSR 8/24/18
EU 8	S-8	One (1) emergency diesel fire pump	2.59 MMBtu/hr (heat input)	None	N/A	N/A	Minor NSR 8/24/18

Emission Units (continued)

Miscellaneous Equipment							
TNK 1 and TNK2	N/A	Two (2) fixed roof above ground storage tanks for No. 2 distillate fuel oil	1,000,000 gallons (nominal storage capacity) (each unit)	None	N/A	N/A	Minor NSR 8/24/18

[1] The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.
[2] CD-1 = dry low NOx technology; CD-2 = water injection
[3] Original Minor NSR Permit was issued on 1/14/02, amended 3/11//03, 5/11/07, reissued 10/27/09, amended 2/26/10 and 6/16/15 and superseded on 8/24/18.
[4] When operated at 100 percent base load at atmospheric conditions – temperature of 59°F, relative humidity of 60 percent and a pressure of 14.7 psia.

Fuel Burning Equipment Requirements – Combustion Turbines (EU 1 – EU 5)

1. **Limitations** – *NOx Emission Controls:* Nitrogen oxides (NOx) emissions from each combustion turbine (CT) (EU 1 – EU 5) shall be controlled by utilization of a dry low-NOx combustor when firing natural gas or water injection when firing No. 2 distillate fuel oil. The CTs shall be provided with adequate access for inspection.
(9 VAC 5-80-490 B & C and Condition 1 of 8/24/18 mNSR Permit)

2. **Limitations** – *SO2 Emission Controls:* Sulfur dioxide (SO2) emissions from each CT (EU 1 – EU 5) shall be controlled by the use of low sulfur fuels.
(9 VAC 5-80-490 B & C and Condition 3 of 8/24/18 mNSR Permit)

3. **Limitations** – *PM10 Emission Controls:* Particulate matter (PM) emissions from each CT (EU 1 – EU 5) shall be controlled by the use of clean burning fuels and good combustion operating practices.
(9 VAC 5-80-490 B & C and Condition 4 of 8/24/18 mNSR Permit)

4. **Limitations** – *VOC and CO Emission Controls:* Volatile organic compounds (VOC) and carbon monoxide (CO) emissions from each CT (EU 1 – EU 5) shall be controlled by the use of good combustion operating practices.
(9 VAC 5-80-490 B & C and Condition 5 of 8/24/18 mNSR Permit)

5. **Limitations** – *CTs' Operating Hours:*

   a. GE (FA) CT (Ref. No. EU 5) Operating Hours:

      i. When firing natural gas, the operation of the CT (Ref. No. EU 5) shall not exceed 1580 hours per year, calculated monthly as the sum of each consecutive twelve month period, excluding the hours specifically attributable to ISO-declared emergencies[1] as outlined in Condition 5.c. below. See Condition 52.b for record keeping requirements to demonstrate compliance with this condition.

      ii. When firing No. 2 distillate fuel oil, the operation of the CT (Ref. No. EU 5) shall not exceed 138 hours per year, calculated monthly as the sum of each consecutive twelve month period, excluding the hours specifically attributable to ISO-declared emergencies as outlined in Condition 5.c. below. See Condition 52.b for record keeping requirements to demonstrate compliance with this condition.

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[1] For purpose of this permit, an ISO emergency is:

   a. An abnormal system condition requiring manual or automatic action to maintain system frequency, to prevent loss of firm load, equipment damage, or tripping of system elements that could adversely affect the reliability of an electric system or the safety of persons or property;
   b. Capacity of deficiency of capacity of excess conditions;
   c. A fuel shortage requiring departure from normal operating procedures in order to minimize the use of such scarce fuel;
   d. Abnormal natural events or man-made threats that would require conservative operations to posture the system in a more reliable state; or
   e. An abnormal event external to the ISO service territory that may require ISO action.

b. GE (EA) CTs (Ref. No. EU 1-4) Operating Hours:

i. When firing natural gas, the combined hours of operation of the CTs (Ref. No. EU 1-4) shall not exceed 6320 hours per year, calculated monthly as the sum of each consecutive twelve month period, excluding the hours specifically attributable to ISO-declared emergencies as outlined in Condition 5.c. below. See Condition 52.b for record keeping requirements to demonstrate compliance with this condition.

ii. When firing No. 2 distillate fuel oil, the combined operation of the CTs (Ref. No. EU 1-4) shall not exceed 552 hours per year, calculated monthly as the sum of each consecutive twelve month period, excluding the hours specifically attributable to ISO-declared emergencies as outlined in Condition 5.c. below. See Condition 52.b for record keeping requirements to demonstrate compliance with this condition.

c. ISO-Declared Emergency Operating Hours (Ref. No. EU 1-5):

i. Any hours of operation firing natural gas on CTs (Ref. No. EU 1-5) attributable to an ISO-Declared Emergency, may be excluded from the limits in Conditions 5.a.i. and 5.b.i. up to a maximum of 96 hours per year for each unit, calculated monthly as the sum of each consecutive twelve month period.

ii. Any hours of operation firing No. 2 distillate fuel oil on CTs (Ref. No. EU 1-5) attributable to an ISO-Declared Emergency, may be excluded from the limits in Conditions 5.a.ii. and 5.b.ii. up to a maximum of 32 hours per year for each unit, calculated monthly as the sum of each consecutive twelve month period.

iii. Hours attributable to an ISO-Declared Emergency will be designated as a minimum of two (2) hours per event per unit as applicable.

iv. See Condition 52.c for record keeping requirements to demonstrate compliance with this condition.

d. Except for start-up and shut-down conditions, fuel switching, re-tuning, scheduled and non-scheduled maintenance, each CT (Ref. No. EU 1-5) shall be operated at 60-100 percent of its base load.

(9 VAC 5-80-490 B & C and Condition 6 of 8/24/18 mNSR Permit)

6. **Limitations** – *Fuel:* The approved fuels for the CTs (EU 1 – EU 5) are natural gas (primary fuel) and No. 2 distillate fuel oil (back-up fuel).

Distillate oil is defined as fuel oil that meets the specifications for Fuel Oil Numbers 1 or 2 under American Society for Testing and Materials, ASTM D396, "Standard Specification for Fuel Oils", or other approved ASTM method, incorporated in 40 CFR 60 by reference. A change in fuel may require a permit to modify and operate.
(9 VAC 5-80-490 B & C and Condition 9 of 8/24/18 mNSR Permit)

7. **Limitations** – *Fuel (Natural Gas):* The maximum sulfur content of the natural gas to be burned in the CTs (EU 1 – EU 5) shall not exceed 20 grains per 100 dry standard cubic feet. The annual average sulfur content

of the natural gas to be burned in the CTs shall not exceed 2 grains per 100 dry standard cubic feet per year, calculated monthly as the average of each consecutive twelve month period. Compliance for the consecutive twelve month period shall be demonstrated monthly by averaging the total for the most recently completed calendar month with the individual monthly values for the preceding eleven months.
(40 CFR §60.333, 9 VAC 5-50-410, 9 VAC 5-80-490 B & C, and Condition 10 of 8/24/18 mNSR Permit)

8. **Limitations** – *Fuel (No. 2 Fuel Oil):* The maximum sulfur content of the No. 2 distillate fuel oil to be burned in the CTs (EU 1 – EU 5) shall not exceed 0.05% by weight.
(40 CFR §60.333, 9 VAC 5-50-410, 9 VAC 5-80-490 B & C, and Condition 11 of 8/24/18 mNSR Permit)

9. **Limitations** – *Alternate Operating Scenario (Fuel Switching):* Fuel switching is limited to the following:

   a. Event 1 – Automatic or Operator Initiated Fuel Switching from Pipeline Natural Gas to Fuel Oil: The period will begin when gas usage is first reduced for the purpose of switching to oil and end when oil consumption and water injection have stabilized.

   b. Event 2 – Operator Initiated Fuel Switching from Fuel Oil to Pipeline Natural Gas: The period will begin when the turbine's work load is reduced for the purpose of switching to natural gas and end when oil usage ceases and the turbine is re-stabilized in Mode 6 or pre-mix combustion modes for Dry Low NOx Burners.

   c. Excess NOx Emissions – Excess NOx emissions from each CT (EU 1 – EU 5) shall be limited to no more than two 1-hour averaging periods for any fuel switching event, unless specifically authorized by DEQ for longer duration prior to the event. For each fuel switching event, the permittee shall:

      i. Operate all equipment in a manner consistent with air pollution control practices for minimizing emissions.

      ii. The permittee has provided and shall maintain a general description of the procedures to be followed during periods of fuel switching to ensure that the best operational practices to minimize emissions will be adhered to and the duration of excess emissions will be minimized.

      iii. The description may be updated as needed by submitting such update to the Regional Air Compliance Manager of the DEQ's Northern Regional Office (NRO) within thirty days of implementation.

      iv. Excess emissions during the fuel switching procedure will be recorded and included in the quarterly Excess Emission Report. The CEM data will be "flagged" to indicate that fuel switching took place.

   (9 VAC 5-80-490 B & C and Condition 16 of 8/24/18 mNSR Permit)

10. **Limitations** – *Short-term Emission Limits (Natural Gas):* Short-term emissions from the operation of each CT (EU 1 – EU 5) while firing natural gas shall not exceed the limits specified below (except during start-up

and shut-down as defined in Condition 12, fuel switching in accordance with Condition 9 and re-tuning in accordance with Condition 26):

a. GE Model PG7241S (FA) CT (Ref. No. EU 5)

PM-10	18 lbs/hr
PM-2.5	18 lbs/hr
Nitrogen Oxides (as NO_2)	10.5 ppmvd @ 15% O_2 (1-hour average)
Nitrogen Oxides (as NO_2)	9.0 ppmvd @ 15% O_2 (30-day average)
Carbon Monoxide	9.0 ppmvd @ 15% O_2 (3-hour average)

b. GE Model PG7121 (EA) CT (Ref. No. EU 1-4) – Each Unit

PM-10	10 lbs/hr
PM-2.5	10 lbs/hr
Nitrogen Oxides (as NO_2)	10.5 ppmvd @ 15% O_2 (1-hour average)
Nitrogen Oxides (as NO_2)	9.0 ppmvd @ 15% O_2 (30-day average)
Carbon Monoxide	25 ppmvd @ 15% O_2 (3-hour average)

c. During fuel switching, as defined in Condition 9, the short-term combustion turbine emission limits for No. 2 distillate fuel oil contained in Condition 11 shall apply when switching from natural gas to fuel oil or from fuel oil to natural gas combustion. Excess emissions during fuel switching shall be any emissions above those specified in Condition 11.

(9 VAC 5-80-490 B & C, 40 CFR §60.332 and Condition 17 of 8/24/18 mNSR Permit)

11. **Limitations** – *Short-term Emission Limits (No. 2 Distillate Fuel Oil):* Short-term emissions from the operation of each CT (EU 1 – EU5) while firing No. 2 distillate fuel oil shall not exceed the limits specified below (except during start-up, shut-down, fuel switching and re-tuning conditions).

a. GE Model PG7241S (FA) CT (Ref. No. EU 5)

PM-10	36 lbs/hr
PM-2.5	36 lbs/hr
Nitrogen Oxides (as NO_2)	42* ppmvd @ 15% O_2 (1-hour average)
Carbon Monoxide	20 ppmvd @ 15% O_2 (3-hour average)

b. GE Model PG7121 (EA) CT (Ref. No. EU 1-4) – Each Unit

PM-10	21 lbs/hr
PM-2.5	21 lbs/hr
Nitrogen Oxides (as NO_2)	42* ppmvd @ 15% O_2 (1-hour average)
Carbon Monoxide	20 ppmvd @ 15% O_2 (3-hour average)

*when fuel bound nitrogen (FBN) content values are $\leq 0.015\%$. For $0.015\% < FBN \leq 0.05\%$, the adjusted standard shall be determined, recorded and maintained upon each new fuel delivery by the following formula (if an adjusted NOx standard is desired by the permittee):

NOx Standard = (0.04*FBN) + 0.0042

where:

FBN = Fuel bound nitrogen content of the distillate fuel oil (percent by weight)

Note (1): 0.0042% = 42 ppm
Note (2): 0.05% is maximum FBN allowed in adjusting the NOx emission standard
Note (3): The definitions of start-up and shut-down are found in Condition 11.

(9 VAC 5-80-490 B & C, 40 CFR §60.332 and Condition 18 of 8/24/18 mNSR Permit)

12. **Limitations** – *Start-up and Shut-down:* For the purposes of this permit, definitions of start-up and shut-down (as they relate to the CTs (EU 1 – EU 5)) are provided below:

a. "Start-up" is defined as either the time from ignition to one hour after achieving Emissions Compliance Control Mode or as the period commencing with ignition of the unit and consisting of two hours of

continuous emission monitoring system (CEMS) data, whichever has the shorter time interval. Emissions Compliance Control Mode is defined as Mode 6 or pre-mix combustion modes for the units, when combusting natural gas fuel. These modes are the low NOx control modes. When combusting fuel oil, the Emissions Compliance Control Mode is achieved when the water injection NOx control system is activated.

b. "Shut-down" is defined as either the period of time from initiation of a turbine shut-down until ignition stops or as the period comprised of the final two hours of CEMS data prior to the time when no fuel is being combusted, whichever has the shorter time interval.

(9 VAC 5-80-490 B & C and Condition 19 of 8/24/18 mNSR Permit)

13. **Limitations** – *CTs Annual Emission Limits:* Total emissions from the combined operation of the five CTs (EU 1 – EU 5) shall not exceed the limits specified below:

a.

Carbon Monoxide	240.6 tons/year
Nitrogen Oxides (as NO_2)	245.1 tons/year

The emissions rates shall be calculated daily as the sum of each consecutive 365-day period.

b. Total emissions from the combined operation of the five (5) CTs (Ref. No. EU 1-5) for all excluded hours associated with ISO-declared emergency (as defined in Condition 5.c) shall not exceed the limits specified below:

Carbon Monoxide	17.28 tons/year
Nitrogen Oxides (as NO_2)	27.84 tons/year
Particulate Matter (PM_{10})	4.70 tons/year
Particulate Matter ($PM_{2.5}$)	4.70 tons/year
Volatile Organic Compounds (VOC)	1.05 tons/year
Sulfur Dioxide (SO_2)	7.06 tons/year

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition 5.c.

(9 VAC 5-80-490 B & C and Condition 20 of 8/24/18 mNSR Permit)

14. **Limitations** – *CTs Visible Emission Limit:* Visible emissions from each CT exhaust stack (EU 1 – EU 5) shall not exceed ten (10) percent opacity except during one 6-minute period in any one hour in which visible emissions shall not exceed twenty (20) percent opacity, as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during start-up, shut-down and malfunction. (9 VAC 5-80-490 B & C and Condition 22 of 8/24/18 mNSR Permit)

15. **Limitations** – *Requirements by Reference:* Except where this permit is more restrictive than the applicable requirement, the CTs (EU 1 – EU 5) shall be operated in compliance with the requirements of 40 CFR 60, Subpart GG (Standards of Performance for Stationary Gas Turbines) and 40 CFR Part 60, Subpart A (General Provisions).
(9 VAC 5-50-400, 9 VAC 5-50-410 and Condition 14 of 8/24/18 mNSR Permit)

16. **Monitoring** – *CEMS Monitoring Data Use:* At the discretion of the Board, the NOx and CO continuous emission monitoring systems (CEMS) required by this permit, the continuous monitoring data, and the quality assurance data shall be used to determine compliance with the NOx and CO emission limits and/or relevant emission standards. Each monitor is subject to such data capture requirements and/or quality assurance requirements as specified in this permit and as may be deemed appropriate by the Board.
(9 VAC 5-80-490 E, 40 CFR §60.334 and Condition 23 of 8/24/18 mNSR Permit)

17. **Monitoring** – *NOx CEMS:* CEMS shall be installed, maintained and operated to measure and record the emissions of nitrogen oxides from each CT's (EU 1 – EU 5) exhaust stack. An oxygen (O_2) monitor shall be co-located with each nitrogen oxides concentration monitor.

    The CEMS shall be installed, calibrated, maintained and operated in accordance with the performance specifications and test procedures (as applicable) identified in 40 CFR 75, Appendices A and B. Upon request by the DEQ, the source shall conduct performance tests.

    The quality assurance of data generated by the CEMS shall be demonstrated by implementing or exceeding the minimum requirements for CEMS quality assurance as defined in 40 CFR 75, Appendix B. A NOx CEMS quality control program which meets the requirements of 40 CFR 75 and 40 CFR 75, Appendix B shall be implemented for all continuous monitoring systems. As per 40 CFR Part 75, Appendix B §2.2.3.f, no more than four (4) successive calendar quarters plus the allowable grace period allowed in 40 CFR Part 75 will elapse without performing a NOx and O_2 analyzer linearity check. As per 40 CFR Part 75, Appendix B §2.3.3.a.4, no more than eight (8) successive calendar quarters plus the allowable grace period allowed in 40 CFR Part 75 will elapse without performing a NOx CEMS relative accuracy test audit (RATA).
(9 VAC 5-80-490 E, 40 CFR §60.334(b) and Condition 24 of 8/24/18 mNSR Permit)

18. **Monitoring** - *CO CEMS* – CEMS shall be installed, maintained and operated to measure and record the concentration of CO from each GE Model PG7121 (EA) CT's exhaust stack (EU 1 – EU 4).

    The CO CEMS shall be installed, calibrated, maintained and operated in accordance with the performance specifications and test procedures (as applicable) identified in 40 CFR §60.13 and 40 CFR 60, Appendices B

and F. Upon request by the DEQ, the source shall conduct performance tests.

The quality assurance of data generated by the CEMS shall be demonstrated by implementing or exceeding the minimum requirements for CEMS quality assurance as defined in 40 CFR 60, Appendix F. A CO CEMS quality control program which meets the requirements of 40 CFR §60.13 and 40 CFR 60, Appendix F shall be implemented for all CO continuous monitoring systems.
The frequencies of the Cylinder Gas Audits (CGAs) and the Relative Accuracy Test Audits (RATAs) for the CO CEMS shall be as follows. The CO CEMS CGAs shall be performed using the same frequency allowed by 40 CFR Part 75, Appendix B for NOx Linearity Error tests. No more than four (4) successive calendar quarters plus the allowable grace period allowed in 40 CFR Part 75 will elapse without performing a CO CEMS CGA. The CO RATAs shall be performed using the same frequency allowed by 40 CFR Part 75 for the NOx CEMS RATA tests. No more than eight (8) successive calendar quarters plus the allowable grace period allowed in 40 CFR Part 75 will elapse without performing a CO CEMS RATA. CO CEMS data validation shall be as specified in 40 CFR §60.334(b)(2). A QA operating quarter shall be as defined in 40 CFR §72.2.
(9 VAC 5-80-490 E and Condition 25 of 8/24/18 mNSR Permit)

19. **Monitoring** – *CEMS Minimum Data Capture:* The NOx and CO CEMS required by this permit shall meet a minimum data capture of 90 percent of each CT's (EU 1 – EU 5, as applicable) operating hours, calculated monthly as the sum of each consecutive twelve-month period. Compliance for the consecutive twelve-month period shall be demonstrated monthly, by first - adding the most recent completed calendar month's total hours of valid CEMS data and total hours of unit operation to their respective monthly totals for the preceding eleven months, and then dividing the total hours of valid CEMS data in the twelve month period by the total hours of unit operation in the twelve month period to determine availability.
(9 VAC 5-80-490 E and Condition 26 of 8/24/18 mNSR Permit)

20. **Monitoring** – *NOx CEMS Failure:* In the event of a NOx CEMS failure, the permittee must either:

    a. Use the maximum allowable hourly NOx emission rate (in lbs/10^6 Btu equivalent to the 1-hour average concentration limits listed in Conditions 10 and 11), for each hour of operation where CEMS data is not available. This data shall be included in the rolling 365-day emission summation; or,

    b. Provide data, which demonstrates an accurate correlation between the water-to-fuel injection curve and actual emission rates. Upon approval of the DEQ, this curve can be used as surrogate CEMS data for future emission calculations.

    (9 VAC 5-80-490 E and Condition 27 of 8/24/18 mNSR Permit)

21. **Monitoring** – *CO CEMS Failure:* In the event of a CO CEMS failure, the permittee must use the maximum short-term CO emission rate (in lbs/10^6 Btu equivalent to the 3-hour average concentration limits listed in

Conditions 10 and 11), for each hour of operation where CEMS data is not available. This data shall be included in the rolling 365-day emission summation.
(9 VAC 5-80-490 E and Condition 28 of 8/24/18 mNSR Permit)

22. **Monitoring** – *Fuel Consumption Monitoring:* The permittee shall install a continuous monitoring system (CMS) to measure and record the flow rate of fuel combusted by each CT (EU 1 – EU 5) for each hour when the unit is combusting fuel. The CMS shall consist of an in-line fuel flow meter, and automatically record the data with a data acquisition and handling system. These records shall be kept on file at the facility for the most current five year period.
(9 VAC 5-80-490 E and Condition 29 of 8/24/18 mNSR Permit)

23. **Monitoring** – *Natural Gas Sulfur Content (Continuing Compliance):* The permittee shall monitor the sulfur content of the natural gas being fired in each CT (EU 1 – EU 5), in accordance with 40 CFR Part 60, Subpart GG. ODEC's EPA approved custom fuel monitoring schedule is as follows:

    a. Analysis for fuel sulfur content of the natural gas shall be conducted using one of the total sulfur methods described in 40 CFR §60.335 (b)(10). Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than 0.4 weight percent (4000 ppmw), ASTM D4084-82 or 94, D5504-01, D6228-98, or Gas Processors Association Standard 2377-86 (all of which are incorporated by reference – see 40 CFR §60.17), which measure the major sulfur compounds, may be used.

    b. Sulfur monitoring shall be conducted twice monthly for twelve months. If this monitoring demonstrates compliance with allowable permit limits, then sulfur monitoring shall be conducted once per month for six months.

    c. If the monitoring required in paragraph b above demonstrates consistent compliance with the fuel sulfur content allowable permit limits, sulfur monitoring shall be conducted once per quarter.

    d. The sulfur analyses required in paragraphs b and c above shall be conducted during unit operating months only.

    e. Should any sulfur analysis required in paragraph b above indicate noncompliance, the permittee shall notify the Regional Air Compliance Manager of the DEQ's NRO. Sulfur monitoring shall be conducted each day the CTs operate during the interim period when this custom schedule is being re-examined and those results may be submitted to show compliance.

    f. If there is a change in fuel supply, the permittee shall notify the Regional Air Compliance Manager of the DEQ's NRO of such change for re-examination of this custom schedule. A change in fuel quality may be deemed a change in fuel supply. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being re-examined.

    g. As per 40 CFR §60.334(h)(3) and not withstanding 40 CFR §60.334(h)(1), the owners or operators may elect not to monitor more frequently than once per year (40 CFR 75, Appendix D, Section 2.3.1.4 or 2.3.2.4) for the total sulfur content of gaseous fuel combusted in a turbine if the gaseous fuel is demonstrated to meet the definition of natural gas in 40 CFR §60.331(u), regardless of whether an existing custom schedule approved by the Administrator for 40 CFR Subpart GG requires such

monitoring. The owner or operator shall use one of the following sources of information to make the required demonstration:

i. The gas quality characteristics in a current valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less; or,

ii. Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, the amount of fuel sampling data shall be as specified in Section 2.3.1.4 or 2.3.2.4 of 40 CFR Part 75, Appendix D.

(9 VAC 5-80-490 E, 40 CFR §60.334(h), 40 CFR §60.334(i)(3) and Condition 30 of 8/24/18 mNSR Permit – See Attachment B for EPA letters dated 3/28/03 and 7/9/04)

24. **Monitoring** – *No. 2 Distillate Fuel Oil's Nitrogen and Sulfur Content:* The permittee shall sample the No. 2 distillate fuel oil storage tanks (TNK 1 and TNK 2) that supply fuel oil to the CTs (EU 1 – EU 5), to determine the sulfur content on each occasion that fuel is transferred to the storage tanks from any other source or fuel vendor. For the purposes of this permit, an oil shipment/transfer is defined as a series of truck transport loads from a vendor's fuel oil tank(s) to each of the permittee's 1,000,000 gallon above ground storage tanks.

Fuel oil sulfur content shall be determined using ASTM D2880 or another approved, applicable ASTM method incorporated by reference in 40 CFR Part 60.

If the permittee claims an allowance for fuel bound nitrogen (see Condition 11 and/or if an F-value greater than zero is being or will be used by the permittee to calculate STD in 40 CFR §60.332), the permittee shall monitor the nitrogen content of the fuel combusted in the turbine in same fashion as for sulfur content required in this permit condition. The nitrogen content of the fuel shall be determined using methods described in §60.335(b)(9) or an EPA approved alternative procedure.
(9 VAC 5-80-490 E and Condition 31 of 8/24/18 mNSR Permit)

25. **Monitoring** – *Fuel Certification:* The permittee shall obtain a certification from the fuel supplier and/or fuel delivery company with each shipment of No. 2 distillate fuel oil. Each fuel supplier certification shall include the following:

a. The name of the fuel supplier/fuel delivery company;

b. The date on which the No. 2 distillate fuel oil was received;

c. The quantity of No. 2 distillate fuel oil delivered in the shipment;

d. A statement that the distillate oil complies with the American Society for Testing and Materials specifications (ASTM D396) for numbers 1 or 2 fuel oil or other approved ASTM method, incorporated in 40 CFR 60 by reference; and,

e. The actual sulfur content of the No. 2 distillate fuel oil, or a fuel sample and analysis independent of that used for certification may be used to determine fuel oil sulfur content.

(9 VAC 5-80-490 E and Condition 12 of 8/24/18 mNSR Permit)

26. **Reporting** – *Excess Emissions (Re-tuning):* Excess emissions resulting from the re-tuning of the CTs (EU 1 thru EU 5) shall be permitted provided that:

a. Best operational practices are adhered to and the duration of excess emissions shall be minimized but in no case exceed twelve hours per combustion turbine (CT) re-tuning event in any twenty-four hour period. The operator may request additional hours from the DEQ.

b. During each CT's re-tuning event, NOx emission concentrations, based on an hourly average, shall not exceed the NOx standards of the New Source Performance Standards (NSPS) 40 CFR 60 Subpart GG – Standards of Performance for Stationary Gas Turbines (40 CFR §60.330 *et seq.*).

c. The permittee shall notify the Regional Air Compliance Manager of the DEQ's NRO no less than twenty-four hours prior to each CT's re-tuning event. The notification shall include, but is not limited to, the following information:

i. Identification of the specific CT to be re-tuned;

ii. Reason for the re-tuning event; and

iii. Measures that will be taken to minimize the length of the re-tuning event.

d. The permittee shall furnish a written report to the Regional Air Compliance Manager of the DEQ's NRO of all pertinent facts concerning the re-tuning event, as soon as practicable but not later than fourteen business days after the re-tuning event. The notification shall include, but is not limited to, the following information:

i. Identification of the CT that was re-tuned; and

ii. The magnitude of excess emissions per CT, any conversion factors used in the calculation of the excess emissions, and the date and time of commencement and completion of each period of excess emissions.

e. NOx emissions during each CT's re-tuning event shall be recorded and included in the associated quarterly reports and in the total annual emissions as required in Conditions 13 and 50.

f. The re-tuning event for each CT shall be identified on the Data Acquisition Report required by Condition 28.

(9 VAC 5-80-490 F and Condition 36 of 8/24/18 mNSR Permit)

27. **Reporting** – *Excess Emissions (Malfunction):* Excess emissions resulting from malfunctions of the CTs (EU 1 thru EU 5) shall be permitted provided that:

    a. Best operational practices are adhered to and the duration of excess emissions shall be minimized.

    b. During each malfunction, NOx emission concentrations, based on an hourly average, shall not exceed the NOx standards of the New Source Performance Standards (NSPS) 40 CFR 60 Subpart GG – Standards of Performance for Stationary Gas Turbines (40 CFR §60.330 *et seq.*).

    c. The permittee shall notify the Regional Air Compliance Manager of the DEQ's NRO within four daytime business hours after a malfunction is discovered. The notification shall include, but is not limited to, the following information:

        i. Identification of the specific CT experiencing the malfunction;

        ii. The nature and quantity of emissions of air pollutants likely to have occurred during the malfunction.

        iii. Measures that will be taken to minimize the length of the malfunction.

    d. As per Conditions 28 and 70, the permittee shall furnish a written report to the Regional Air Compliance Manager of the DEQ's NRO of all pertinent facts concerning the malfunction event. The notification shall include, but is not limited to, the following information:

        i. Identification of the CT that experienced the malfunction; and

        ii. The magnitude of excess emissions per CT, any conversion factors used in the calculation of the excess emissions, and the date and time of commencement and completion of each period of excess emissions.

    e. NOx emissions during each malfunction shall be recorded and included in the total annual emissions as listed in Conditions 13 and 50.

    f. The malfunction for each CT shall be identified on the Data Acquisition Report required by Condition 28.

    (9 VAC 5-80-490 F and Condition 37 of 8/24/18 mNSR Permit)

28. **Reporting** – *Reports for Continuous Monitoring Systems (Data Acquisition Report):* The permittee shall furnish on a quarterly basis written reports of excess emissions from any process monitored by a CEMS. The reports shall be sent to the Regional Air Compliance Manager of the DEQ's NRO, postmarked no later than the 30th day following the end of the calendar quarter. These reports shall include, but are not limited to the following information:

    a. For each month in the quarter, report each hour in which a CO permit limit is exceeded. The report shall include the following for each excess emission of CO: start time, duration, equipment involved, actual CO emissions in ppmdv@ 15% O2, fuel type and consumption rate, actual weather conditions (temperature, barometric pressure and humidity) and CT load.

b. For each month in the quarter, report each hour in which a NOx permit limit is exceeded. The report shall include the following for each excess emission of NOx: start time, duration, equipment involved, actual NOx emissions in ppmdv@ 15% O_2, fuel type and consumption rate, nitrogen content of fuel oil (if oil fired and as required by Condition 24), actual weather conditions (temperature, barometric pressure and humidity) and CT load.

c. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired or adjusted, such information shall be stated in the report.

(9 VAC 5-50-400 and Condition 33 of 8/24/18 mNSR Permit)

Fuel Burning Equipment Requirements – Natural Gas Pipeline Heaters (EU 6 & EU 7)

29. **Limitations** – *NOx Emission Controls:* Nitrogen oxides (NOx) emissions from each natural gas pipeline heater (EU 6 and EU 7) shall be controlled by the use of good combustion operating techniques. Each natural gas pipeline heater shall be provided with adequate access for inspection.
(9 VAC 5-80-490 B & C and Condition 2 of 8/24/18 mNSR Permit)

30. **Limitations** – *SO2 Emission Controls:* Sulfur dioxide (SO2) emissions from each natural gas pipeline heater (EU 6 and EU 7) shall be controlled by the use of low sulfur fuels.
(9 VAC 5-80-490 B & C and Condition 3 of 8/24/18 mNSR Permit)

31. **Limitations** – *PM10 Emission Controls:* Particulate matter (PM) emissions from each natural gas pipeline heater (EU 6 and EU 7) shall be controlled by the use of clean burning fuels and good combustion operating practices.
(9 VAC 5-80-490 B & C and Condition 4 of 8/24/18 mNSR Permit)

32. **Limitations** – *VOC and CO Emission Controls:* Volatile organic compounds (VOC) and carbon monoxide (CO) emissions from each natural gas pipeline heater (EU 6 and EU 7) shall be controlled by the use of good combustion operating practices.
(9 VAC 5-80-490 B & C and Condition 5 of 8/24/18 mNSR Permit)

33. **Limitations** – *Pipeline Heaters' Fuel Throughput:* The combined natural gas consumption of the two natural gas fuel pipeline heaters (EU 6 and EU 7) shall not exceed 33 x 10^6 cubic feet per year, calculated monthly as the sum of each consecutive twelve month period. See Condition 52 for record keeping requirements to demonstrate compliance with this condition.
(9 VAC 5-80-490 B & C and Condition 8 of 8/24/18 mNSR Permit)

34. **Limitations** – *Fuel:* The approved fuel for the pipeline heaters (EU 6 and EU 7) is natural gas. A change in the fuel may require a permit to modify and operate.
(9 VAC 5-80-490 B & C and Condition 9 of 8/24/18 mNSR Permit)

35. **Limitations** – *Fuel (Natural Gas):* The maximum sulfur content of the natural gas to be burned in the pipeline heaters (EU 6 and EU 7) shall not exceed 20 grains per 100 dry standard cubic feet. The annual average sulfur content of the natural gas to be burned in the pipeline heaters shall not exceed 2 grains per 100 dry standard cubic feet per year, calculated monthly as the average of each consecutive twelve month period. Compliance for the consecutive twelve month period shall be demonstrated monthly by averaging the total for the most recently completed calendar month with the individual monthly values for the preceding eleven months.
(9 VAC 5-80-490 B & C, and Condition 10 of 8/24/18 mNSR Permit)

36. **Limitations** – *Visible Emission Limit:* Visible emissions from each pipeline heater (EU 6 and EU 7) shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent. This condition applies at all times except during startup, shutdown and malfunction.
(9 VAC 5-80-490 and 9 VAC 5-50-80)

Fuel Burning Equipment Requirements – Emergency Diesel Fire Pump (EU 8)

37. **Limitations** – *NOx Emission Controls:* Nitrogen oxides (NOx) emissions from the emergency diesel fire pump (EU 8) shall be controlled by the use of good combustion operating techniques. The emergency diesel fire pump shall be provided with adequate access for inspection.
(9 VAC 5-80-490 B & C and Condition 2 of 8/24/18 mNSR Permit)

38. **Limitations** – *SO2 Emission Controls:* Sulfur dioxide (SO2) emissions from the emergency diesel fire pump (EU 8) shall be controlled by the use of low sulfur fuels.
(9 VAC 5-80-490 B & C and Condition 3 of 8/24/18 mNSR Permit)

39. **Limitations** – *PM10 Emission Controls:* Particulate matter (PM) emissions from the emergency diesel fire pump (EU 8) shall be controlled by the use of clean burning fuels and good combustion operating practices.
(9 VAC 5-80-490 B & C and Condition 4 of 8/24/18 mNSR Permit)

40. **Limitations** – *VOC and CO Emission Controls:* Volatile organic compounds (VOC) and carbon monoxide (CO) emissions from the emergency diesel fire pump (EU 8) shall be controlled by the use of good combustion operating practices.
(9 VAC 5-80-490 B & C and Condition 5 of 8/24/18 mNSR Permit)

41. **Limitations** – *Fire Pump's Operating Hours:* The operation of the emergency diesel fire pump (EU 8) shall not exceed 52 hours per year, calculated monthly as the sum of each consecutive twelve month period. See Condition 52 for record keeping requirements to demonstrate compliance with this condition.
(9 VAC 5-80-490 B & C and Condition 7 of 8/24/18 mNSR Permit)

42. **Limitations** – *Fuel:* The approved fuel for the emergency diesel fire pump (EU 8) is No. 2 distillate fuel oil, which is defined as fuel oil that meets the specifications for Fuel Oil Numbers 1 or 2 under American Society

for Testing and Materials, ASTM D396, "Standard Specification for Fuel Oils", or other approved ASTM method, incorporated in 40 CFR 60 by reference. A change in fuel may require a permit to modify and operate.
(9 VAC 5-80-490 B & C and Condition 9 of 8/24/18 mNSR Permit)

43. **Limitations** – *Fuel (No. 2 Fuel Oil):* The maximum sulfur content of the No. 2 distillate fuel oil to be burned in the emergency diesel fire pump (EU 8) shall not exceed 0.5% by weight.
(9 VAC 5-80-490 B & C and Condition 11 of 8/24/18 mNSR Permit)

44. **Limitations** – *Requirements by Reference:* Except where this permit is more restrictive than the applicable requirement, the emergency diesel fire pump (EU 8) shall be operated in compliance with the requirements of 40 CFR 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines and 40 CFR 63, Subpart A – General Provisions.
(9 VAC 5-80-490 A, 40 CFR §63.6665, Table 8 of 40 CFR 63, Subpart ZZZZ, and 40 CFR 63, Subpart A)

45. **Limitations** – *Operational Use:* In order for the emergency diesel fire pump (EU 8) to be considered an emergency stationary reciprocating internal combustion engine (RICE) under 40 CFR 63, Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in 40 CFR §63.6640 (f), paragraphs (f)(1) through (4), is prohibited. If the unit is not operated according to the requirements in 40 CFR §63.6640 (f), paragraphs (f)(1) through (4), the emergency diesel fire pump will not be considered an emergency engine under 40 CFR Part 63, Subpart ZZZZ and must meet all requirements for non-emergency engines.
(9 VAC 5-80-490 A and 40 CFR §63.6640 (f))

46. **Limitations** – *Work Practice Standards:* For the fire pump (EU 8), the permittee shall:

    a. Change oil and filter every 500 hours of operation or annually, whichever comes first;

    b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and

    c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

    Note 1: Sources have the option to utilize an oil analysis program as described in 40 CFR §63.6625 (i) or (j) in order to extend the specified oil change requirement in Condition 46.a (Table 2d of 40 CFR 63, Subpart ZZZZ).

    Note 2: If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in this Permit Condition (Table 2d of 40 CFR 63, Subpart ZZZZ), or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to

perform the management practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

(9 VAC 5-80-490 A, 40 CFR §63.6603(a), 40 CFR §63.6640 and Table 2d of 40 CFR 63 Subpart ZZZZ)

47. **Monitoring** – *Continuous Compliance:* The permittee shall:

    a. Operate and maintain the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or

    b. Develop and follow its own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

    (9 VAC 5-80-490 A, 40 CFR §63.6640 and Table 6 of 40 CFR 63 Subpart ZZZZ)

48. **Monitoring** – *Hour Meter:* The permittee shall install a non-resettable hour meter on the emergency diesel fire pump (EU 8) if one is not already installed.
    (9 VAC 5-80-490 A and 40 CFR §63.6625(f))

Miscellaneous Equipment Requirements – No. 2 Fuel Oil Storage Tanks (TNK 1 and TNK 2)

49. **Limitations** – *Fuel Tanks:* The two 1,000,000 gallons fixed-roof above ground storage tanks (TNK 1 and TNK 2) shall be used to store only No. 2 distillate fuel oil.
    (9 VAC 5-80-490 B & C and Condition 13 of 8/24/18 mNSR Permit)

Facility-Wide Conditions

50. **Limitations** – *Facility-Wide Annual Emission Limits:* Total emissions from the combined operation of all the emission sources at the Louisa Generation Facility (as listed in the Emissions Unit Table – Fuel Burning Equipment) shall not exceed the limits specified below:

Carbon Monoxide	242.7 tons/year
Nitrogen Oxides (as NO2)	247.6 tons/year

The emission rates shall be calculated daily as the sum of each consecutive 365-day period.
(9 VAC 5-80-490 B & C and Condition 21 of 8/24/18 mNSR Permit)

51. **Monitoring** – *Maintenance/Operating Procedures:* The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:

    a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.

    b. Maintain an inventory of spare parts.

    c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.

    d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures, prior to their first operation of such equipment. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

    (9 VAC 5-80-490 B & C and Condition 39 of 8/24/18 mNSR Permit)

52. **Recordkeeping** – *Onsite Records:* The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Regional Air Compliance Manager of the DEQ's NRO. These records shall include, but are not limited to:

    a. Fuel records to demonstrate compliance with Conditions 6, 7, 8, 23, 24, 25, 34, 35, 42 and 43.

    b. Annual hours of operation for each CT (EU 1 – EU 5) on fuel oil and natural gas, excluding the hours specifically attributable to ISO-declared emergencies, calculated monthly as the sum of each consecutive twelve-month period, as required by Condition 5a and 5.b.

    c. Annual hours of operation attributable to ISO-declared emergencies, calculated monthly as the sum of each consecutive twelve-month period, as required by Condition 5.c, and the corresponding information related to each ISO-declared emergency, to include but not limited to, documentation of the ISO-declared emergency, date, time and length of operation.

    d. Annual fuel consumption for each natural gas pipeline heater (EU 6 and EU 7), calculated monthly as the sum of each consecutive twelve-month period, as required by Condition 33.

    e. Annual hours of operation for the emergency diesel fire pump (EU 8), calculated monthly as the sum of each consecutive twelve-month period, as required by Condition 41.

    f. The hourly fuel consumption (in scf/hour and gallons/hour) of each CT (EU 1 – EU 5), when in operation, as required in Condition 22.

    g. Data and calculations necessary to demonstrate compliance with the emission limits contained in Conditions 13 and 50.

    h. Records as required by 40 CFR §63.6655 for the emergency diesel fire pump (EU 8).

i. Scheduled and unscheduled maintenance and operator training, as required in Condition 51.

j. Results of all stack tests, visible emission evaluations and performance evaluations.

k. Continuous monitoring system calibrations and calibration checks.

Compliance for the consecutive twelve month period (as applicable for the items above) shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding eleven months.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years, unless otherwise noted.
(9 VAC 5-80-490 F, Condition 32 of 8/24/18 mNSR Permit and 6/16/15, and 40 CFR §63.6655)

53. **Testing** – *Monitoring Ports:* Upon request by the DEQ, the permitted facility shall be modified so as to allow for emissions testing and monitoring upon reasonable notice at any time, using appropriate methods. This includes modifying the facility such that volumetric flow rates and pollutant emission rates can be accurately determined by the applicable test methods and providing stack or duct that is free from cyclonic flow. Test ports shall be provided when requested at the appropriate locations.
(9 VAC 5-80-490 E & F and Condition 15 of 8/24/18 mNSR Permit)

54. **Testing** – *Other:* If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.
(9 VAC 5-80-490 E)

55. **Reporting** – *Correspondence:* All DEQ correspondence concerning this permit should be submitted to the following address:

Regional Air Compliance Manager
Department of Environmental Quality
Northern Regional Office
13901 Crown Court
Woodbridge, VA 22193

Unless otherwise specified, all EPA correspondence concerning this permit should be submitted to the following address:

U.S. Environmental Protection Agency, Region III
Air Protection Division (3AP12)
1650 Arch Street
Philadelphia, PA 19103-2029

(9 VAC 5-80-490 B & C)

56. **Reporting** – *Notification for Control Equipment Maintenance:* The permittee shall furnish notification to the Regional Air Compliance Manager of the DEQ's NRO of intention to shut-down or bypass, or both, air pollution control equipment for necessary scheduled maintenance, which results in excess emissions for more than one hour, at least twenty-four hours prior to the shut-down. The notification shall include, but is not limited to, the following information:

    a. Identification of the air pollution control equipment to be taken out of service, as well as its location, and registration number;

    b. The expected length of time that the air pollution control equipment will be out of service;

    c. The nature and quantity of emissions of air pollutants likely to occur during the shut-down period;

    d. Measures that will be taken to minimize the length of the shut-down or to negate the effect of the outage.

    (9 VAC 5-80-490 F and Condition 34 of 8/24/18 mNSR Permit)

57. **Reporting** – *Certification of Documents:*

    a. The following documents submitted to the board shall be signed by a responsible official: (i) any emission statement, application, form, report, or compliance certification; (ii) any document required to be so signed by any provision of the regulations of the board; or (iii) any other document containing emissions data or compliance information the owner wishes the board to consider in the administration of its air quality programs. A responsible official is defined as follows:

        i. For a business entity, such as a corporation, association or cooperative, a responsible official is either:

            (a) The president, secretary, treasurer, or a vice president of the business entity in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the business entity; or

            (b) A duly authorized representative of such business entity if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either (i) the facilities employ more than 250 persons or have gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars) or (ii) the authority to sign documents has been assigned or delegated to such representative in accordance with procedures of the business entity.

        ii. For a partnership or sole proprietorship, a responsible official is a general partner or the proprietor, respectively.

        iii. For a municipality, state, federal, or other public agency, a responsible official is either a principal executive officer or ranking elected official. A principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

b. Any person signing a document under subsection 'a' of this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering and evaluating the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

c. Subsection 'b' of this condition shall be interpreted to mean that the signer must have some form of direction or supervision over the persons gathering the data and preparing the document (the preparers), although the signer need not personally nor directly supervise these activities. The signer need not be in the same line of authority as the preparers, nor do the persons gathering the data and preparing the form need to be employees (e.g., outside contractors can be used). It is sufficient that the signer has authority to assure that the necessary actions are taken to prepare a complete and accurate document.

d. Any person who fails to submit any relevant facts or who has submitted incorrect information in a document shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.

(9 VAC 5-80-490 F and Condition 38 of 8/24/18 mNSR Permit)

Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720.

Emission Unit No.	Emission Unit Description	Citation 9 VAC 5-80-720 A, B, or C	Pollutant(s) Emitted (if applicable to 9 VAC 5-80-720 B)	Rated Capacity (if applicable to 9 VAC 5-80-720 C)
IS-1	Fuel Oil Tank for Emergency Diesel Fire Pump	9 VAC 5-80-720 B	VOC < 1 tpy	280 gallons
IS-2	CT Units 1-5 Turbine Lube Oil System Reservoirs	9 VAC 5-80-720 B	VOC < 1 tpy	4 @ 2,500 gallons 1 @ 6,200 gallons
IS-3	CT Units 1-5 Propylene Glycol Coolant System Reservoirs	9 VAC 5-80-720 B	VOC < 1 tpy	4 @ 2,500 gallons 1 @ 3,000 gallons
IS-4	CT Units 1-5 False Start Drain Tanks	9 VAC 5-80-720 B	VOC < 1 tpy	4 @ 400 gallons 1 @ 500 gallons
IS-5	Oil Water Separators (5)	9 VAC 5-80-720 B	VOC < 1 tpy	1 @ 1,000 gallons 1 @ 6000 gallons

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, monitoring, recordkeeping and reporting shall not be required for these emission units in accordance with 9 VAC 5-80-490 C, E, and F.

Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Non Applicability
40 CFR 60 Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	the heaters are less than 10 MMBtu/hr.
40 CFR 60 Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels)	the storage vessels store liquids with a vapor pressure less than 3.5 kilopascals (0.5 psia).
40 CFR 60 Subpart KKKK	Standards of Performance for Stationary Combustion Turbines	the stationary combustion turbines commenced construction before February 18, 2005
40 CFR 63 Subpart YYYY	National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines	rule applies only to major sources of HAP; ODEC-Louisa is not a major source of HAP
40 CFR 63 Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Major Sources	rule applies only to major sources of HAP; ODEC-Louisa is not a major source of HAP
40 CFR 63 Subpart UUUUU	National Emission Standards for Hazardous Air Pollutants for Coal- and Oil-Fired Electric Utility Steam Generating Units	does not apply to gas-fired, non-steam turbines such as those operated by ODEC-Louisa (EU1-EU5).
40 CFR 63 Subpart JJJJJJ	National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers at Area Sources	does not apply to gas-fired boilers or to process heaters (such as ODEC-Louisa's gas-fired pipeline gas heaters EU6 and EU7), as they are excluded from the definition of boiler in 40 CFR 63.11237.

Nothing in this permit shield shall alter the provisions of § 303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by (i) the administrator pursuant to § 114 of the federal Clean Air Act, (ii) the Board pursuant to § 10.1-1314 or § 10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to § 10.1-1307.3 of the Virginia Air Pollution Control Law.
(9 VAC 5-80-500)

General Conditions

58. **Federal Enforceability** - All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable. (9 VAC 5-80-490 N)

59. **Permit Expiration** - This permit has a fixed term of five years. The expiration date shall be the date five years from the effective date of the permit. Unless the owner submits a timely and complete renewal application to the Department of Environmental Quality (DEQ) consistent with 9 VAC 5-80-430, the right of the facility to operate shall terminate upon permit expiration.
(9 VAC 5-80-430 B, C and F, 9 VAC 5-80-490 D and 9 VAC 5-80-530 B)

60. **Permit Expiration** - The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
(9 VAC 5-80-430 B, C and F, 9 VAC 5-80-490 D and 9 VAC 5-80-530 B)

61. **Permit Expiration** - If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 3, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-510.
(9 VAC 5-80-430 B, C and F, 9 VAC 5-80-490 D and 9 VAC 5-80-530 B)

62. **Permit Expiration** - No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-430 for a renewal permit, except in compliance with a permit issued under Article 3, Part II of 9 VAC 5 Chapter 80.
(9 VAC 5-80-430 B, C and F, 9 VAC 5-80-490 D and 9 VAC 5-80-530 B)

63. **Permit Expiration** - If an applicant submits a timely and complete application under section 9 VAC 5-80-430 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-500 , shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
(9 VAC 5-80-430 B, C and F, 9 VAC 5-80-490 D and 9 VAC 5-80-530 B)

64. **Permit Expiration** - The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-430 shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-430 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.
(9 VAC 5-80-430 B, C and F, 9 VAC 5-80-490 D and 9 VAC 5-80-530 B)

65. **Recordkeeping and Reporting** - All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:

    a. The date, place as defined in the permit, and time of sampling or measurements.

    b. The date(s) analyses were performed.

c. The company or entity that performed the analyses.

d. The analytical techniques or methods used.

e. The results of such analyses.

f. The operating conditions existing at the time of sampling or measurement.

(9 VAC 5-80-490 F)

66. **Recordkeeping and Reporting** - Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. (9 VAC 5-80-490 F)

67. **Recordkeeping and Reporting** - The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than March 1 and September 1 of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-430 G and shall include:

a. The time period included in the report. The time periods to be addressed are January 1 to June 30 inclusive and July 1 to December 31 inclusive.

b. All deviations from permit requirements. For purposes of this permit, a deviation includes, but are not limited to:

i. Exceedance of emissions limitations or operational restrictions;

ii. Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or compliance assurance monitoring which indicates an exceedance of emission limitations or operational restrictions; or,

iii. Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.

c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."

(9 VAC 5-80-490 F)

68. **Annual Compliance Certification** - Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than March 1 each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with VAC 5-80-430 G, and shall include:

a. The time period included in the certification. The time period to be addressed is January 1 to December 31.

b. A description of the means for assessing or monitoring the compliance of the source with its emissions limitations, standards, and work practices.

c. The identification of each term or condition of the permit that is the basis of the certification.

d. Consistent with subsection 9 VAC 5-80-490 E, the method or methods used for determining the compliance status of the source at the time of certification and over the certification period.

e. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.

f. The status of compliance with the terms and conditions of this permit for the certification period.

g. Such other facts as the permit may require to determine the compliance status of the source.

One copy of the annual compliance certification shall be sent to EPA at the following address:

R3_APD_Permits@epa.gov

(9 VAC 5-80-490 K.5)

69. **Permit Deviation Reporting** - The permittee shall notify the Director of the Northern Regional Office (NRO) within four daytime business hours, after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition 67 of this permit. (9 VAC 5-80-490 F.2)

70. **Failure/Malfunction Reporting** - In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after discovery, notify the DEQ by facsimile transmission, telephone, telegraph, or email of such failure or malfunction and shall within 14-days provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the DEQ. (9 VAC 5-20-180 C and Condition 35 of 8/24/18 mNSR Permit)

71. **Failure/Malfunction Reporting** - The emission units that have continuous monitors subject to 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not subject to the two week written notification.
(9 VAC 5-20-180 C, 9 VAC 5-40-50, and 9 VAC 5-50-50)

72. **Failure/Malfunction Reporting** - The emission units subject to the reporting and the procedure requirements of 9 VAC 5-40-50 C and the procedures of 9 VAC 5-50-50 C are listed below:

    a. EU 1

    b. EU 2

    c. EU 3

    d. EU 4

    e. EU 5

    (9 VAC 5-20-180 C, 9 VAC 5-40-50, and 9 VAC 5-50-50)

73. **Failure/Malfunction Reporting** - Each owner required to install a continuous monitoring system subject to 9 VAC 5-40-41 or 9 VAC 5-50-410 shall submit a written report of excess emissions (as defined in the applicable emission standard) to the board for every calendar quarter. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter and shall include the following information:

    a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h) or 9 VAC 5-40-41 B 6, any conversion factors used, and the date and time of commencement and completion of each period of excess emissions;

    b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the source. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted;

    c. The date and time identifying each period during which the continuous monitoring system was inoperative and the associated emissions unit was operative, except for zero and span checks and the nature of the system repairs or adjustments; and

    d. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired or adjusted, such information shall be stated in the report.

    (9 VAC 5-20-180 C, 9 VAC 5-40-50, and 9 VAC 5-50-50)

74. **Failure/Malfunction Reporting** - All emission units not subject to 9 VAC 5-40-50 C and 9 VAC 5-50-50 C must make written reports within 14 days of the malfunction occurrence.
(9 VAC 5-20-180 C, 9 VAC 5-40-50, and 9 VAC 5-50-50)

75. **Severability** - The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or

impair the remaining conditions, requirements, or portions of the permit.
(9 VAC 5-80-490 G.1)

76. **Duty to Comply** - The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
(9 VAC 5-80-490 G.2)

77. **Need to Halt or Reduce Activity not a Defense** - It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
(9 VAC 5-80-490 G.3)

78. **Permit Modification** - A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-360, 9 VAC 5-80-1100, 9 VAC 5-80-1605, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.
(9 VAC 5-80-490 G and L, 9 VAC 5-80-550, and 9 VAC 5-80-660)

79. **Property Rights** - The permit does not convey any property rights of any sort, or any exclusive privilege.
(9 VAC 5-80-490 G.5)

80. **Duty to Submit Information** - The permittee shall furnish to the board, within a reasonable time, any information that the board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the board along with a claim of confidentiality.
(9 VAC 5-80-490 G.6)

81. **Duty to Submit Information** - Any document (including reports) required in a permit condition to be submitted under the Acid Rain program to the board shall contain a certification by the designated representative that meets the requirements of 9 VAC 5-80-430 G. Any application form, report, compliance certification or other document required to be submitted to the board that concerns applicable requirements other than the acid rain program requirements may be signed by a responsible official other than the designated representative, provided the responsible official meets the criteria in Condition 57.
(9 VAC 5-80-490 K.1)

82. **Duty to Pay Permit Fees** - The owner of any source for which a permit under 9 VAC 5-80-360 through 9 VAC 5-80-700 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 et seq. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.
(9 VAC 5-80-490 H)

83. **Fugitive Dust Emission Standards** - During the operation of a stationary source or any other building, structure, facility or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited, to the following:

    a. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;

    b. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust, the paving of roadways and the maintaining of them in a clean condition;

    c. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;

    d. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and

    e. The prompt removal of spilled or traced dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

    (9 VAC 5-40-20 E, 9 VAC 5-50-90, and 9 VAC 5-50-50)

84. **Startup, Shutdown and Malfunction** - At all times, including periods of startup, shutdown, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. (9 VAC 5-40-20 E, and 9 VAC 5-50-20 E)

85. **Alternative Operating Scenarios** - Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-500 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80 Article 3.
(9 VAC 5-80-490 J)

86. **Inspection and Entry Requirements** - The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

    a. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.

    b. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.

c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.

d. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-490 K.2)

87. **Reopening for Cause** - The permit shall be reopened by the board if additional federal requirements become applicable to a major source with a remaining permit term of three or more years. Such a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-430 F.

a. The permit shall be reopened if the board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

b. The permit shall be reopened if the administrator or the board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

c. The permit shall not be reopened by the board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-490 D.

(9 VAC 5-80-490 L)

88. **Permit Availability** - Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.
(9 VAC 5-80-510 G)

89. **Transfer of Permits** - No person shall transfer a permit from one location to another or from one piece of equipment to another.
(9 VAC 5-80-520)

90. **Transfer of Permits** - In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-560.
(9 VAC 5-80-520)

91. **Transfer of Permits** - In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-560.
(9 VAC 5-80-520)

92. **Malfunction as an Affirmative Defense** - A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of Condition 93 of this permit are met.
(9 VAC 5-80-650)

93. **Malfunction as an Affirmative Defense** - The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:

    a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.

    b. The permitted facility was at the time being properly operated.

    c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.

    d. The permittee notified the board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-490 F.2.b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.

    (9 VAC 5-80-650)

94. **Malfunction as an Affirmative Defense** - In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.
(9 VAC 5-80-650)

95. **Malfunction as an Affirmative Defense** - The provisions of Conditions 92-94 are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.
(9 VAC 5-80-650)

96. **Permit Revocation or Termination for Cause** - A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 3. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any of the grounds for revocation or termination or for any other violations of these regulations.
(9 VAC 5-80-490 G & L, 9 VAC 5-80-640 and 9 VAC 5-80-660)

97. **Duty to Supplement or Correct Application** - Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submits such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source

after the date a complete application was filed but prior to release of a draft permit.
(9 VAC 5-80-430 E)

98. **Stratospheric Ozone Protection** - If the permittee handles or emits one or more Class I or II substance subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.
(40 CFR Part 82, Subparts A - F)

99. **Asbestos Requirement** - The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).
(9 VAC 5-60-70 and 9 VAC 5-80-490 A)

100. **Accidental Release Prevention** - If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined under 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.
(40 CFR Part 68)

101. **Changes to Permits for Emissions Trading** - No permit revision shall be required, under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.
(9 VAC 5-80-490 I)

102. **Emissions Trading** - Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

    a. All terms and conditions required under 9 VAC 5-80-490 except subsection N shall be included to determine compliance.

    b. The permit shield described in 9 VAC 5-80-500 shall extend to all terms and conditions that allow such increases and decreases in emissions.

    c. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-360 through 9 VAC 5-80-700.

    (9 VAC 5-80-490 I)

Title IV (Phase II Acid Rain) Permit Allowances and Requirements

103. **Statutory and Regulatory Authorities** - In accordance with the Air Pollution Control Law of Virginia §10.1-1308 and §10.1-1322, the Environmental Protection Agency (EPA) Final Full Approval of the Operating Permits Program (Titles IV and V) published in the Federal Register December 4, 2001, Volume 66, Number 233, Rules and Regulations, Pages 62961-62967 and effective November 30, 2001, and Title 40, the Code of Federal Regulations §§72.1 through 76.16, the Commonwealth of Virginia Department of Environmental Quality issues this permit pursuant to 9 VAC 5 Chapter 80, Article 3 of the Virginia Regulations for the Control and Abatement of Air Pollution (Federal Operating Permit Article 3).
(9 VAC 5-80-490 B.2)

104. **SO_2 Allowance Allocations and NO_x Requirements for Affected Units**

		2015	2016	2017	2018	2019
EU 1 Thru EU 5	SO_2 allowances, allocated by U. S. EPA. (tons)	None	None	None	None	None
EU 1 Thru EU 5	NO_x limit	The CTs are gas-fired or oil-fired units and are not subject to NO_x limitations under 40 CFR Part 76				

(9 VAC 5-80-490 A.4)

105. **Additional Requirements** - ODEC Louisa Generation Facility shall submit a complete permit application that includes all of the information required under 40 CFR §§72.21 and 72.31 at least 6 months, but no earlier than 18 months, prior to the date of expiration of the existing Phase II Acid Rain permit. EPA forms shall be used.
(9 VAC 5-80-430 C.5)

106. **Notes** - These units were not eligible for SO_2 allowance allocation by U.S. EPA under Section 405 of the Clean Air Act and the Acid Rain Program, so none were assigned in 40 CFR Part 73, Table 2.
(9 VAC 5-80-420 C.6)

107. **Justifications** - EU 1 through EU5 are gas-fired or oil-fired units and are not subject to NOx limitations under 40 CFR Part 76.
(9 VAC 5-80-420 D)

Cross-State Air Pollution Rule (CSAPR) – (Transport Rule)

108. **Cross-State Air Pollution Rule (CSAPR)** – The permittee shall comply with all applicable Cross-State Air Pollution Rule (CSAPR) requirements (40 CFR Part 97, Subparts AAAAA – DDDDD) by the compliance date specified in 40 CFR 97, Subparts AAAAA – DDDDD, as amended.
(40 CFR Part 97, Subparts AAAAA – DDDDD and 9 VAC 5-80-110)

109. The Transport Rule (TR) subject unit(s), and the unit-specific monitoring provisions, at this source are identified in the following table(s). These unit(s) are subject to the requirements for the TR NO_X Annual Trading Program, TR NO_X Ozone Season Trading Program, and TR SO_2 Group 1 Trading Program.

Unit IDs: EU 1, EU 2, EU 3, EU 4 and EU 5, each a non-peaking gas and oil-fired simple-cycle combustion turbine					
Parameter	Continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR part 75, subpart B (for SO_2 monitoring) and 40 CFR part 75, subpart H (for NO_X monitoring)	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR part 75, appendix D	Excepted monitoring system requirements for gas- and oil-fired peaking units pursuant to 40 CFR part 75, appendix E	Low Mass Emissions excepted monitoring (LME) requirements for gas- and oil-fired units pursuant to 40 CFR 75.19	EPA-approved alternative monitoring system requirements pursuant to 40 CFR part 75, subpart E
SO_2		X	----------		
NO_X	X	----------			
Heat input		X	----------		

(40 CFR Part 97, Subparts AAAAA – DDDDD and 9 VAC 5-80-110)

110. The above description of the monitoring used by a unit does not change, create an exemption from, or otherwise affect the monitoring, recordkeeping, and reporting requirements applicable to the unit under 40 CFR 97.430 through 97.435 (TR NO_X Annual Trading Program), 97.530 through 97.535 (TR NO_X Ozone Season Trading Program), and 97.630 through 97.635 (TR SO_2 Group 1 Trading Program). The monitoring,

recordkeeping and reporting requirements applicable to each unit are included below in the standard conditions for the applicable TR trading programs.
(40 CFR Part 97, Subparts AAAAA – DDDDD and 9 VAC 5-80-110)

111. Owners and operators must submit to the Administrator a monitoring plan for each unit in accordance with 40 CFR 75.53, 75.62 and 75.73, as applicable. The monitoring plan for each unit is available at the EPA's website at http://www.epa.gov/airmarkets/emissions/monitoringplans.html.
(40 CFR Part 97, Subparts AAAAA – DDDDD and 9 VAC 5-80-110)

112. Owners and operators that want to use an alternative monitoring system must submit to the Administrator a petition requesting approval of the alternative monitoring system in accordance with 40 CFR part 75, subpart E and 40 CFR 75.66 and 97.435 (TR NO_X Annual Trading Program), 97.535 (TR NO_X Ozone Season Trading Program), and/or 97.635 (TR SO_2 Group 1 Trading Program). The Administrator's response approving or disapproving any petition for an alternative monitoring system is available on the EPA's website at http://www.epa.gov/airmarkets/emissions/petitions.html.
(40 CFR Part 97, Subparts AAAAA – DDDDD and 9 VAC 5-80-110)

113. Owners and operators that want to use an alternative to any monitoring, recordkeeping, or reporting requirement under 40 CFR 97.430 through 97.434 (TR NO_X Annual Trading Program), 97.530 through 97.534 (TR NO_X Ozone Season Trading Program), and/or 97.630 through 97.634 (TR SO_2 Group 1 Trading Program) must submit to the Administrator a petition requesting approval of the alternative in accordance with 40 CFR 75.66 and 97.435 (TR NO_X Annual Trading Program), 97.535 (TR NO_X Ozone Season Trading Program), and/or 97.635 (TR SO_2 Group 1 Trading Program). The Administrator's response approving or disapproving any petition for an alternative to a monitoring, recordkeeping, or reporting requirement is available on the EPA's website at http://www.epa.gov/airmarkets/emissions/petitions.html.
(40 CFR Part 97, Subparts AAAAA – DDDDD and 9 VAC 5-80-110)

114. The descriptions of monitoring applicable to the unit included above meet the requirement of 40 CFR 97.430 through 97.434 (TR NO_X Annual Trading Program), 97.530 through 97.534 (TR NO_X Ozone Season Trading Program), and 97.630 through 97.634 (TR SO_2 Group 1 Trading Program), and therefore minor permit modification procedures, in accordance with 40 CFR 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B), may be used to add or change this unit's monitoring system description.
(40 CFR Part 97, Subparts AAAAA – DDDDD and 9 VAC 5-80-110)

115. **TR NO_X Annual Trading Program requirements (40 CFR 97.406)**

a. **Designated Representative Requirements** - The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.413 through 97.418.

b. **Emissions Monitoring, Reporting, and Recordkeeping Requirements**

i. The owners and operators, and the designated representative, of each TR NO_X Annual source and each TR NO_X Annual unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.430 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.431 (initial monitoring system certification and recertification procedures), 97.432 (monitoring system out-of-control periods), 97.433 (notifications concerning monitoring), 97.434

(recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.435 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).

ii. The emissions data determined in accordance with 40 CFR 97.430 through 97.435 shall be used to calculate allocations of TR NO_X Annual allowances under 40 CFR 97.411(a)(2) and (b) and 97.412 and to determine compliance with the TR NO_X Annual emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.430 through 97.435 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

c. **NOX Emissions Requirements**

i. TR NO_X Annual emissions limitation

(a) As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR NO_X Annual source and each TR NO_X Annual unit at the source shall hold, in the source's compliance account, TR NO_X Annual allowances available for deduction for such control period under 40 CFR 97.424(a) in an amount not less than the tons of total NO_X emissions for such control period from all TR NO_X Annual units at the source.

(b) If total NO_X emissions during a control period in a given year from the TR NO_X Annual units at a TR NO_X Annual source are in excess of the TR NO_X Annual emissions limitation set forth in paragraph (c)(1)(i) above, then:

(A) The owners and operators of the source and each TR NO_X Annual unit at the source shall hold the TR NO_X Annual allowances required for deduction under 40 CFR 97.424(d); and

(B) The owners and operators of the source and each TR NO_X Annual unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart AAAAA and the Clean Air Act.

ii. TR NO_X Annual assurance provisions

(a) If total NO_X emissions during a control period in a given year from all TR NO_X Annual units at TR NO_X Annual sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO_X emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR NO_X Annual allowances available for deduction for such control period under 40 CFR 97.425(a) in an amount

equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.425(b), of multiplying— (A) The quotient of the amount by which the common designated representative's share of such NO_X emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such NO_X emissions exceeds the respective common designated representative's assurance level; and (B) The amount by which total NO_X emissions from all TR NO_X Annual units at TR NO_X Annual sources in the state for such control period exceed the state assurance level.

(b) The owners and operators shall hold the TR NO_X Annual allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.

(c) Total NO_X emissions from all TR NO_X Annual units at TR NO_X Annual sources in the State during a control period in a given year exceed the state assurance level if such total NO_X emissions exceed the sum, for such control period, of the state NO_X Annual trading budget under 40 CFR 97.410(a) and the state's variability limit under 40 CFR 97.410(b).

(d) It shall not be a violation of 40 CFR part 97, subpart AAAAA or of the Clean Air Act if total NO_X emissions from all TR NO_X Annual units at TR NO_X Annual sources in the State during a control period exceed the state assurance level or if a common designated representative's share of total NO_X emissions from the TR NO_X Annual units at TR NO_X Annual sources in the state during a control period exceeds the common designated representative's assurance level.

(e) To the extent the owners and operators fail to hold TR NO_X Annual allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,

(A) The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and

(B) Each TR NO_X Annual allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart AAAAA and the Clean Air Act.

iii. Compliance Periods

(a) A TR NO_X Annual unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of January 1, 2015, or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.430(b) and for each control period thereafter.

(b) A TR NO_X Annual unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.430(b) and for each control period thereafter.

iv. Vintage of allowances held for compliance

(a) A TR NO_X Annual allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a TR NO_X Annual allowance that was allocated for such control period or a control period in a prior year.

(b) A TR NO_X Annual allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a TR NO_X Annual allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.

v. Allowance Management System requirements. Each TR NO_X Annual allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart AAAAA.

vi. Limited authorization. A TR NO_X Annual allowance is a limited authorization to emit one ton of NO_X during the control period in one year. Such authorization is limited in its use and duration as follows:

(a) Such authorization shall only be used in accordance with the TR NO_X Annual Trading Program; and

(b) Notwithstanding any other provision of 40 CFR part 97, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.

vii. Property right. A TR NO_X Annual allowance does not constitute a property right.

d. **Title V Permit Revision Requirements**

i. No title V permit revision shall be required for any allocation, holding, deduction, or transfer of TR NO_X Annual allowances in accordance with 40 CFR part 97, Subpart AAAAA.

ii. This permit incorporates the TR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.430 through 97.435, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR part 75, subparts B and H), an excepted monitoring system (pursuant to 40 CFR part 75, appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR part 75, subpart E). Therefore, the Description of TR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.406(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

e. **Additional Recordkeeping and Reporting Requirements**

i. Unless otherwise provided, the owners and operators of each TR NO_X Annual source and each TR NO_X Annual unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This

period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.

(a) The certificate of representation under 40 CFR 97.416 for the designated representative for the source and each TR NO_X Annual unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.416 changing the designated representative.

(b) All emissions monitoring information, in accordance with 40 CFR Part 97, Subpart AAAAA.

(c) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the TR NO_X Annual Trading Program.

ii. The designated representative of a TR NO_X Annual source and each TR NO_X Annual unit at the source shall make all submissions required under the TR NO_X Annual Trading Program, except as provided in 40 CFR 97.418. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR parts 70 and 71.

f. **Liability**

i. Any provision of the TR NO_X Annual Trading Program that applies to a TR NO_X Annual source or the designated representative of a TR NO_X Annual source shall also apply to the owners and operators of such source and of the TR NO_X Annual units at the source.

ii. Any provision of the TR NO_X Annual Trading Program that applies to a TR NO_X Annual unit or the designated representative of a TR NO_X Annual unit shall also apply to the owners and operators of such unit.

g. **Effect on Other Authorities**

No provision of the TR NO_X Annual Trading Program or exemption under 40 CFR 97.405 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR NO_X Annual source or TR NO_X Annual unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

(40 CFR Part 97, Subparts AAAAA – DDDDD and 9 VAC 5-80-110)

116. **TR NO_X Ozone Season Trading Program requirements (40 CFR 97.506)**

a. **Designated Representative Requirements** - the owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.513 through 97.518.

b. **Emissions Monitoring, Reporting, and Recordkeeping Requirements**

i. The owners and operators, and the designated representative, of each TR NOX Ozone Season source and each TR NOX Ozone Season unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.530 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.531 (initial monitoring system certification and recertification procedures), 97.532 (monitoring system out-of-control periods), 97.533 (notifications concerning monitoring), 97.534 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.535 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).

ii. The emissions data determined in accordance with 40 CFR 97.530 through 97.535 shall be used to calculate allocations of TR NOX Ozone Season allowances under 40 CFR 97.511(a)(2) and (b) and 97.512 and to determine compliance with the TR NOX Ozone Season emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.530 through 97.535 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

c. **NOx Emissions Requirements**

i. TR NO_X Ozone Season emissions limitation

(a) As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR NO_X Ozone Season source and each TR NO_X Ozone Season unit at the source shall hold, in the source's compliance account, TR NO_X Ozone Season allowances available for deduction for such control period under 40 CFR 97.524(a) in an amount not less than the tons of total NO_X emissions for such control period from all TR NO_X Ozone Season units at the source.

(b) If total NO_X emissions during a control period in a given year from the TR NO_X Ozone Season units at a TR NO_X Ozone Season source are in excess of the TR NO_X Ozone Season emissions limitation set forth in paragraph (c)(1)(i) above, then:

(A) The owners and operators of the source and each TR NO_X Ozone Season unit at the source shall hold the TR NO_X Ozone Season allowances required for deduction under 40 CFR 97.524(d); and

(B) The owners and operators of the source and each TR NO_X Ozone Season unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the

same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart BBBBB and the Clean Air Act.

ii. TR NO_X Ozone Season assurance provisions

(a) If total NO_X emissions during a control period in a given year from all TR NO_X Ozone Season units at TR NO_X Ozone Season sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO_X emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR NO_X Ozone Season allowances available for deduction for such control period under 40 CFR 97.525(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.525(b), of multiplying—

(A) The quotient of the amount by which the common designated representative's share of such NO_X emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such NO_X emissions exceeds the respective common designated representative's assurance level; and

(B) The amount by which total NO_X emissions from all TR NO_X Ozone Season units at TR NO_X Ozone Season sources in the state for such control period exceed the state assurance level.

(b) The owners and operators shall hold the TR NO_X Ozone Season allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.

(c) Total NO_X emissions from all TR NO_X Ozone Season units at TR NO_X Ozone Season sources in the state during a control period in a given year exceed the state assurance level if such total NO_X emissions exceed the sum, for such control period, of the State NO_X Ozone Season trading budget under 40 CFR 97.510(a) and the state's variability limit under 40 CFR 97.510(b).

(d) It shall not be a violation of 40 CFR Part 97, Subpart BBBBB or of the Clean Air Act if total NO_X emissions from all TR NO_X Ozone Season units at TR NO_X Ozone Season sources in the state during a control period exceed the state assurance level or if a common designated representative's share of total NO_X emissions from the TR NO_X Ozone Season units at TR NO_X Ozone Season sources in the state during a control period exceeds the common designated representative's assurance level.

(e) To the extent the owners and operators fail to hold TR NO_X Ozone Season allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,

(A) The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and

(B) Each TR NO_X Ozone Season allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart BBBBB and the Clean Air Act.

iii. Compliance periods

(a) A TR NO_X Ozone Season unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of May 1, 2015 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.530(b) and for each control period thereafter.

(b) A TR NO_X Ozone Season unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.530(b) and for each control period thereafter.

iv. Vintage of allowances held for compliance.

(a) A TR NO_X Ozone Season allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a TR NO_X Ozone Season allowance that was allocated for such control period or a control period in a prior year.

(b) A TR NO_X Ozone Season allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a TR NO_X Ozone Season allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.

v. Allowance Management System requirements. Each TR NO_X Ozone Season allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart BBBBB.

vi. Limited authorization. A TR NO_X Ozone Season allowance is a limited authorization to emit one ton of NO_X during the control period in one year. Such authorization is limited in its use and duration as follows:

(a) Such authorization shall only be used in accordance with the TR NO_X Ozone Season Trading Program; and

(b) Notwithstanding any other provision of 40 CFR Part 97, Subpart BBBBB, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.

vii. Property right. A TR NO_X Ozone Season allowance does not constitute a property right.

d. **Title V Permit Revision Requirements**

i. No title V permit revision shall be required for any allocation, holding, deduction, or transfer of TR NO_X Ozone Season allowances in accordance with 40 CFR Part 97, Subpart BBBBB.

ii. This permit incorporates the TR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.530 through 97.535, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR part 75, subparts B and H), an excepted monitoring system (pursuant to 40 CFR part 75, appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR part 75, subpart E). Therefore, the Description of TR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.506(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

e. **Additional Recordkeeping and Reporting Requirements**

i. Unless otherwise provided, the owners and operators of each TR NO_X Ozone Season source and each TR NO_X Ozone Season unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.

(a) The certificate of representation under 40 CFR 97.516 for the designated representative for the source and each TR NO_X Ozone Season unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.516 changing the designated representative.

(b) All emissions monitoring information, in accordance with 40 CFR Part 97, Subpart BBBBB.

(c) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the TR NO_X Ozone Season Trading Program.

ii. The designated representative of a TR NO_X Ozone Season source and each TR NO_X Ozone Season unit at the source shall make all submissions required under the TR NO_X Ozone Season Trading Program, except as provided in 40 CFR 97.518. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR parts 70 and 71.

f. **Liability**

i. Any provision of the TR NO_X Ozone Season Trading Program that applies to a TR NO_X Ozone Season source or the designated representative of a TR NO_X Ozone Season source shall also apply to the owners and operators of such source and of the TR NO_X Ozone Season units at the source.

ii. Any provision of the TR NO_X Ozone Season Trading Program that applies to a TR NO_X Ozone Season unit or the designated representative of a TR NO_X Ozone Season unit shall also apply to the owners and operators of such unit.

g. **Effect on Other Authorities**

No provision of the TR NO_X Ozone Season Trading Program or exemption under 40 CFR 97.505 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR NO_X Ozone Season source or TR NO_X Ozone Season unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

(40 CFR Part 97, Subpart BBBBB and 9 VAC 5-80-110)

117. TR SO_2 Group 1 Trading Program requirements (40 CFR 97.606)

a. **Designated Representative Requirements**

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.613 through 97.618.

b. **Emissions Monitoring, Reporting, and Recordkeeping Requirements**

i. The owners and operators, and the designated representative, of each TR SO_2 Group 1 source and each TR SO_2 Group 1 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.630 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.631 (initial monitoring system certification and recertification procedures), 97.632 (monitoring system out-of-control periods), 97.633 (notifications concerning monitoring), 97.634 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.635 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).

ii. The emissions data determined in accordance with 40 CFR 97.630 through 97.635 shall be used to calculate allocations of TR SO_2 Group 1 allowances under 40 CFR 97.611(a)(2) and (b) and 97.612 and to determine compliance with the TR SO_2 Group 1 emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.630 through 97.635 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

c. **SO_2 Emissions Requirements**

i. TR SO_2 Group 1 emissions limitation

(a) As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR SO_2 Group 1 source and each TR SO2 Group 1 unit at the source shall hold, in the source's compliance account, TR SO_2 Group 1 allowances available for deduction for such control period under 40 CFR 97.624(a) in an amount not less than the tons of total SO_2 emissions for such control period from all TR SO_2 Group 1 units at the source.

(b) If total SO_2 emissions during a control period in a given year from the TR SO_2 Group 1 units at a TR SO_2 Group 1 source are in excess of the TR SO_2 Group 1 emissions limitation set forth in paragraph (c)(1)(i) above, then:

(A) The owners and operators of the source and each TR SO_2 Group 1 unit at the source shall hold the TR SO_2 Group 1 allowances required for deduction under 40 CFR 97.624(d); and

(B) The owners and operators of the source and each TR SO_2 Group 1 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation 40 CFR Part 97, Subpart CCCCC and the Clean Air Act.

ii. TR SO_2 Group 1 assurance provisions

(a) If total SO_2 emissions during a control period in a given year from all TR SO_2 Group 1 units at TR SO_2 Group 1 sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such SO_2 emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR SO_2 Group 1 allowances available for deduction for such control period under 40 CFR 97.625(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.625(b), of multiplying—

(A) The quotient of the amount by which the common designated representative's share of such SO_2 emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such SO_2 emissions exceeds the respective common designated representative's assurance level; and

(B) The amount by which total SO_2 emissions from all TR SO_2 Group 1 units at TR SO_2 Group 1 sources in the state for such control period exceed the state assurance level.

(b) The owners and operators shall hold the TR SO_2 Group 1 allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first

business day thereafter (if November 1 is not a business day), immediately after such control period.

(c) Total SO_2 emissions from all TR SO_2 Group 1 units at TR SO_2 Group 1 sources in the state during a control period in a given year exceed the state assurance level if such total SO_2 emissions exceed the sum, for such control period, of the state SO_2 Group 1 trading budget under 40 CFR 97.610(a) and the state's variability limit under 40 CFR 97.610(b).

(d) It shall not be a violation of 40 CFR part 97, subpart CCCCC or of the Clean Air Act if total SO_2 emissions from all TR SO_2 Group 1 units at TR SO_2 Group 1 sources in the state during a control period exceed the state assurance level or if a common designated representative's share of total SO_2 emissions from the TR SO_2 Group 1 units at TR SO_2 Group 1 sources in the state during a control period exceeds the common designated representative's assurance level.

(e) To the extent the owners and operators fail to hold TR SO_2 Group 1 allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,

(A) The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and

(B) Each TR SO_2 Group 1 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart CCCCC and the Clean Air Act.

iii. Compliance periods

(a) A TR SO_2 Group 1 unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of January 1, 2015 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.630(b) and for each control period thereafter.

(b) A TR SO_2 Group 1 unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.630(b) and for each control period thereafter.

iv. Vintage of allowances held for compliance

(a) A TR SO_2 Group 1 allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a TR SO_2 Group 1 allowance that was allocated for such control period or a control period in a prior year.

(b) A TR SO_2 Group 1 allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a TR SO_2 Group 1 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.

v. Allowance Management System requirements. Each TR SO_2 Group 1 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart CCCCC.

vi. Limited authorization. A TR SO_2 Group 1 allowance is a limited authorization to emit one ton of SO_2 during the control period in one year. Such authorization is limited in its use and duration as follows:

(a) Such authorization shall only be used in accordance with the TR SO_2 Group 1 Trading Program; and

(b) Notwithstanding any other provision of 40 CFR Part 97, Subpart CCCCC, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.

vii. Property right. A TR SO_2 Group 1 allowance does not constitute a property right.

d. **Title V Permit Revision Requirements**

i. No title V permit revision shall be required for any allocation, holding, deduction, or transfer of TR SO_2 Group 1 allowances in accordance with 40 CFR Part 97, Subpart CCCCC.

ii. This permit incorporates the TR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.630 through 97.635, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR part 75, subparts B and H), an excepted monitoring system (pursuant to 40 CFR part 75, appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR part 75.19), and an alternative monitoring system (pursuant to 40 CFR part 75, subpart E), Therefore, the Description of TR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.606(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

e. **Additional Recordkeeping and Reporting Requirements.**

i. Unless otherwise provided, the owners and operators of each TR SO_2 Group 1 source and each TR SO_2 Group 1 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.

(a) The certificate of representation under 40 CFR 97.616 for the designated representative for the source and each TR SO_2 Group 1 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.616 changing the designated representative.

(b) All emissions monitoring information, in accordance with 40 CFR Part 97, Subpart CCCCC.

(c) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the TR SO_2 Group 1 Trading Program.

ii. The designated representative of a TR SO_2 Group 1 source and each TR SO_2 Group 1 unit at the source shall make all submissions required under the TR SO_2 Group 1 Trading Program, except as provided in 40 CFR 97.618. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR parts 70 and 71.

f. **Liability**

i. Any provision of the TR SO_2 Group 1 Trading Program that applies to a TR SO_2 Group 1 source or the designated representative of a TR SO_2 Group 1 source shall also apply to the owners and operators of such source and of the TR SO_2 Group 1 units at the source.

ii. Any provision of the TR SO_2 Group 1 Trading Program that applies to a TR SO_2 Group 1 unit or the designated representative of a TR SO_2 Group 1 unit shall also apply to the owners and operators of such unit.

g. **Effect on Other Authorities**

No provision of the TR SO_2 Group 1 Trading Program or exemption under 40 CFR 97.605 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR SO_2 Group 1 source or TR SO_2 Group 1 unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

(40 CFR Part 97, Subpart CCCCC and 9 VAC 5-80-110)

ATTACHMENT A

Acid Rain Permit Application

OVERNIGHT DELIVERY

Old Dominion Electric Cooperative

June 29, 2007

Mr. Terry Darton
Regional Permit Manager
Department of Environmental Quality
NVRO - FSO
806 Westwood Office Park
Fredericksburg, Virginia 22401

Subject: Old Dominion Electric Cooperative (Old Dominion) – Louisa Generation Facility (LGF) – CAIR Permit Application
Registration Number: 40989

Dear Mr. Darton:

Enclosed please find the CAIR permit application documents for LGF. A completed CAIR permit application and the appropriate pages of the Form 7 are included. The Certificate of Representation was completed on-line via the CAMD website, so a copy of the Certificate of Representation report has been included for your reference.

If you have any questions, feel free to contact Mr. David Smith at (804) 968-4045 or Mr. Dahlgren Vaughan at (804) 968-7149.

Sincerely,

Kenneth Alexander
Vice President Engineering Services

Enclosures

cc: Lisa Johnson

Innsbrook Corporate Center • 4201 Dominion Boulevard • Glen Allen, Virginia 23060
Tel: 804-747-0592 www.odec.com Fax: 804-747-3742

DOCUMENT CERTIFICATION

Facility Name: Louisa Generation Facility

Registration No. 40989

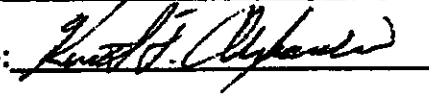
Facility Location: 3352 Klockner Road, Gordonsville, VA 22942

Type of Submittal Attached: CAIR Permit Application

Certification: I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering and evaluating the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name of Responsible Official (Print): Kenneth Alexander

Title: Vice President Engineering Services

Signature:  **Date:** 6-29-07

CAIR Permit Application
(for sources covered under a CAIR SIP)

For more information, refer to 40 CFR 96.121, 96.122, 96.221, 96.222, 96.321, and 96.322

This submission is: ☒ New ☐ Revised

STEP 1
Identify the source by plant name, State, and ORIS or facility code

Plant Name	State	ORIS/Facility Code
Louisa Generation Facility	**Virginia**	**7837**

STEP 2
Enter the unit ID# for each CAIR unit and indicate to which CAIR programs each unit is subject (by placing an "X" in the column)

Unit ID#	NO_X Annual	SO_2	NO_X Ozone Season
EU1	X	X	X
EU2	X	X	X
EU3	X	X	X
EU4	X	X	X
EU5	X	X	X

STEP 3
Read the standard requirements and the certification, enter the name of the CAIR designated representative, and sign and date

Standard Requirements

(a) Permit Requirements.

(1) The CAIR designated representative of each CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) required to have a title V operating permit and each CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) required to have a title V operating permit at the source shall:

(i) Submit to the permitting authority a complete CAIR permit application under §96.122, §96.222, and §96.322 (as applicable) in accordance with the deadlines specified in §96.121, §96.221, and §96.321 (as applicable); and

(ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review a CAIR permit application and issue or deny a CAIR permit.

(2) The owners and operators of each CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) required to have a title V operating permit and each CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) required to have a title V operating permit at the source shall have a CAIR permit issued by the permitting authority under subpart CC, CCC, and CCCC (as applicable) of 40 CFR part 96 for the source and operate the source and the unit in compliance with such CAIR permit.

(3) Except as provided in subpart II, III, and IIII (as applicable) of 40 CFR part 96, the owners and operators of a CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) that is not otherwise required to have a title V operating permit and each CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) that is not otherwise required to have a title V operating permit are not required to submit a CAIR permit application, and to have a CAIR permit, under subpart CC, CCC, and CCCC (as applicable) of 40 CFR part 96 for such CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) and such CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable).

STEP 3, continued

(b) Monitoring, reporting, and recordkeeping requirements.

(1) The owners and operators, and the CAIR designated representative, of each CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) and each CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) at the source shall comply with the monitoring, reporting, and recordkeeping requirements of subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96.

(2) The emissions measurements recorded and reported in accordance with subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96 shall be used to determine compliance by each CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) with the CAIR NO_X emissions limitation, CAIR SO_2 emissions limitation, and CAIR NO_X Ozone Season emissions limitation (as applicable) under paragraph (c) of §96.106, §96.206, and §96.306 (as applicable).

(c) Nitrogen oxides emissions requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_X source and each CAIR NO_X unit at the source shall hold, in the source's compliance account, CAIR NO_X allowances available for compliance deductions for the control period under §96.154(a) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO_X units at the source, as determined in accordance with subpart HH of 40 CFR part 96.

(2) A CAIR NO_X unit shall be subject to the requirements under paragraph (c)(1) of §96.106 for the control period starting on the later of January 1, 2009 or the deadline for meeting the unit's monitor certification requirements under §96.170(b)(1), (2), or (5) and for each control period thereafter.

(3) A CAIR NO_X allowance shall not be deducted, for compliance with the requirements under paragraph (c)(1) of §96.106, for a control period in a calendar year before the year for which the CAIR NO_X allowance was allocated.

(4) CAIR NO_X allowances shall be held in, deducted from, or transferred into or among CAIR NO_X Allowance Tracking System accounts in accordance with subparts FF, GG, and II of 40 CFR part 96.

(5) A CAIR NO_X allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO_X Annual Trading Program. No provision of the CAIR NO_X Annual Trading Program, the CAIR permit application, the CAIR permit, or an exemption under §96.105 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.

(6) A CAIR NO_X allowance does not constitute a property right.

(7) Upon recordation by the Administrator under subpart EE, FF, GG, or II of 40 CFR part 96, every allocation, transfer, or deduction of a CAIR NO_X allowance to or from a CAIR NO_X source's compliance account is incorporated automatically in any CAIR permit of the source that includes the CAIR NO_X unit.

Sulfur dioxide emission requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR SO_2 source and each CAIR SO_2 unit at the source shall hold, in the source's compliance account, a tonnage equivalent of CAIR SO_2 allowances available for compliance deductions for the control period under §96.254(a) and (b) not less than the tons of total sulfur dioxide emissions for the control period from all CAIR SO_2 units at the source, as determined in accordance with subpart HHH of 40 CFR part 96.

(2) A CAIR SO_2 unit shall be subject to the requirements under paragraph (c)(1) of §96.206 for the control period starting on the later of January 1, 2010 or the deadline for meeting the unit's monitor certification requirements under §96.270(b)(1), (2), or (5) and for each control period thereafter.

(3) A CAIR SO_2 allowance shall not be deducted, for compliance with the requirements under paragraph (c)(1) of §96.206, for a control period in a calendar year before the year for which the CAIR SO_2 allowance was allocated.

(4) CAIR SO_2 allowances shall be held in, deducted from, or transferred into or among CAIR SO_2 Allowance Tracking System accounts in accordance with subparts FFF, GGG, and III of 40 CFR part 96.

(5) A CAIR SO_2 allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO_2 Trading Program. No provision of the CAIR SO_2 Trading Program, the CAIR permit application, the CAIR permit, or an exemption under §96.205 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.

(6) A CAIR SO_2 allowance does not constitute a property right.

(7) Upon recordation by the Administrator under subpart FFF, GGG, or III of 40 CFR part 96, every allocation, transfer, or deduction of a CAIR SO_2 allowance to or from a CAIR SO_2 source's compliance account is incorporated automatically in any CAIR permit of the source that includes the CAIR SO_2 unit.

Nitrogen oxides ozone season emissions requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_X Ozone Season source and each CAIR NO_X Ozone Season unit at the source shall hold, in the source's compliance account, CAIR NO_X Ozone Season allowances available for compliance deductions for the control period under §96.354(a) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO_X Ozone Season units at the source, as determined in accordance with subpart HHHH of 40 CFR part 96.

(2) A CAIR NO_X Ozone Season unit shall be subject to the requirements under paragraph (c)(1) of §96.306 for the control period starting on the later of May 1, 2009 or the deadline for meeting the unit's monitor certification requirements under §96.370(b)(1), (2), (3) or (7) and for each control period thereafter.

(3) A CAIR NO_X Ozone Season allowance shall not be deducted, for compliance with the requirements under paragraph (c)(1) of §96.306, for a control period in a calendar year before the year for which the CAIR NO_X Ozone Season allowance was allocated.

(4) CAIR NO_X Ozone Season allowances shall be held in, deducted from, or transferred into or among CAIR NO_X Ozone Season Allowance Tracking System accounts in accordance with subparts FFFF, GGGG, and IIII of 40 CFR part 96.

(5) A CAIR NO_X allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO_X Ozone Season Trading Program. No provision of the CAIR NO_X Ozone Season Trading Program, the CAIR permit application, the CAIR permit, or an exemption under §96.305 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.

(6) A CAIR NO_X allowance does not constitute a property right.

(7) Upon recordation by the Administrator under subpart EEEE, FFFF, GGGG, or IIII of 40 CFR part 96, every allocation, transfer, or deduction of a CAIR NO_X Ozone Season allowance to or from a CAIR NO_X Ozone Season source's compliance account is incorporated automatically in any CAIR permit of the source.

Louisa Generation Facility
Plant Name (from Step 1)

STEP 3, continued

(d) Excess emissions requirements.

If a CAIR NO_x source emits nitrogen oxides during any control period in excess of the CAIR NO_x emissions limitation, then:

(1) The owners and operators of the source and each CAIR NO_x unit at the source shall surrender the CAIR NO_x allowances required for deduction under §96.154(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law; and

(2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of this subpart, the Clean Air Act, and applicable State law.

If a CAIR SO_2 source emits sulfur dioxide during any control period in excess of the CAIR SO_2 emissions limitation, then:

(1) The owners and operators of the source and each CAIR SO_2 unit at the source shall surrender the CAIR SO_2 allowances required for deduction under §96.254(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law; and

(2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of this subpart, the Clean Air Act, and applicable State law.

If a CAIR NO_x Ozone Season source emits nitrogen oxides during any control period in excess of the CAIR NO_x Ozone Season emissions limitation, then:

(1) The owners and operators of the source and each CAIR NO_x Ozone Season unit at the source shall surrender the CAIR NO_x Ozone Season allowances required for deduction under §96.354(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law; and

(2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of this subpart, the Clean Air Act, and applicable State law.

(e) Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the CAIR NO_x source, CAIR SO_2 source, and CAIR NO_x Ozone Season source (as applicable) and each CAIR NO_x unit, CAIR SO_2 unit, and CAIR NO_x Ozone Season unit (as applicable) at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the permitting authority or the Administrator.

(i) The certificate of representation under §96.113, §96.213, and §96.313 (as applicable) for the CAIR designated representative for the source and each CAIR NO_x unit, CAIR SO_2 unit, and CAIR NO_x Ozone Season unit (as applicable) at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under §96.113, §96.213, and §96.313 (as applicable) changing the CAIR designated representative.

(ii) All emissions monitoring information, in accordance with subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96, provided that to the extent that subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96 provides for a 3-year period for recordkeeping, the 3-year period shall apply.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_x Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_x Ozone Season Trading Program (as applicable).

(iv) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO_x Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_x Ozone Season Trading Program (as applicable) or to demonstrate compliance with the requirements of the CAIR NO_x Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_x Ozone Season Trading Program (as applicable).

(2) The CAIR designated representative of a CAIR NO_x source, CAIR SO_2 source, and CAIR NO_x Ozone Season source (as applicable) and each CAIR NO_x unit, CAIR SO_2 unit, and CAIR NO_x Ozone Season unit (as applicable) at the source shall submit the reports required under the CAIR NO_x Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_x Ozone Season Trading Program (as applicable) including those under subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96.

(f) Liability.

(1) Each CAIR NO_x source, CAIR SO_2 source, and CAIR NO_x Ozone Season source (as applicable) and each NO_x unit, CAIR SO_2 unit, and CAIR NO_x Ozone Season unit (as applicable) shall meet the requirements of the CAIR NO_x Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_x Ozone Season Trading Program (as applicable).

(2) Any provision of the CAIR NO_x Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_x Ozone Season Trading Program (as applicable) that applies to a CAIR NO_x source, CAIR SO_2 source, and CAIR NO_x Ozone Season source (as applicable) or the CAIR designated representative of a CAIR NO_x source, CAIR SO_2 source, and CAIR NO_x Ozone Season source (as applicable) shall also apply to the owners and operators of such source and of the CAIR NO_x units, CAIR SO_2 units, and CAIR NO_x Ozone Season units (as applicable) at the source.

(3) Any provision of the CAIR NO_x Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_x Ozone Season Trading Program (as applicable) that applies to a CAIR NO_x unit, CAIR SO_2 unit, and CAIR NO_x Ozone Season unit (as applicable) or the CAIR designated representative of a CAIR NO_x unit, CAIR SO_2 unit, and CAIR NO_x Ozone Season unit (as applicable) shall also apply to the owners and operators of such unit.

Louisa Generation Facility
Plant Name (from Step 1)

STEP 3, continued

(g) Effect on Other Authorities.
No provision of the CAIR NO_x Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_x Ozone Season Trading Program (as applicable), a CAIR permit application, a CAIR permit, or an exemption under § 96.105, §96.205, and §96.305 (as applicable) shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_x source, CAIR SO_2 source, and CAIR NO_x Ozone Season source (as applicable) or CAIR NO_x unit, CAIR SO_2 unit, and CAIR NO_x Ozone Season unit (as applicable) from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

Certification

I am authorized to make this submission on behalf of the owners and operators of the source or units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Alvin D. Vaughan, Alternate Representative Name	
Alvin D. Vaughan Signature	6-29-07 Date

COMMONWEALTH OF VIRGINIA
Department of Environmental Quality

AIR PERMIT APPLICATION
General information
CHECK ALL FORMS THAT APPLY AND LIST ALL ATTACHED DOCUMENTS.

MAP AND LOCALITIES LIST (Information), Pages iii-vi
CONFIDENTIAL INFORMATION, Page vii-viii
FORMULA-BASED HAZARDOUS AIR POLLUTANT INFORMATION, Page ix
HAZARDOUS AIR POLLUTANT LIST (Information), Pages xi-xii
__ REQUEST FOR LOCAL GOVERNMENT CERTIFICATION FORM, Page xiii
_1 CONTENTS AND DOCUMENT CERTIFICATION, Page 1
_1 GENERAL INFORMATION, Page 2
_1 GENERAL INFORMATION (continued), Page 3
__ FUEL-BURNING EQUIPMENT, Page 4
__ PROCESSING, Page 5
__ INKS, COATINGS, STAINS, AND ADHESIVES, Page 6
__ INCINERATORS, Page 7
__ VOLATILE ORGANIC COMPOUND/PETROLEUM STORAGE TANKS, Page 8
__ VOLATILE ORGANIC COMPOUND/PETROLEUM STORAGE TANKS - CONTINUED, Page 9
__ LOADING RACKS AND OIL-WATER SEPARATORS, Page 10
__ STACK PARAMETERS AND FUEL DATA, Page 11
__ AIR POLLUTION CONTROL AND MONITORING EQUIPMENT, PAGE 12
__ AIR POLLUTION CONTROL/SUPPLEMENTAL INFORMATION, PAGE 13
__ PROPOSED MAXIMUM CRITERIA POLLUTANT EMISSIONS, Page 14
__ PAST ACTUAL ANNUAL CRITERIA POLLUTANT EMISSIONS, Page 15
__ TOXIC OR HAP EMISSIONS, Page 16
__ OTHER REGULATED EMISSIONS, Page 17
__ OPERATING PERIODS, Page 18

LIST ATTACHED DOCUMENTS
__ MAP of SITE LOCATION
__ FACILITY SITE PLAN
__ PROCESS FLOW DIAGRAM/SCHEMATIC
__ MSDS or CPDS SHEETS
__ ESTIMATED EMISSIONS CALCULATIONS
__ STACK TESTS
__ AIR MODEL DATA

Note added form sheets above; also indicate the number of copies of each form in blank provided.

DOCUMENT CERTIFICATION FORM
(see other side for instructions)

I certify under penalty of law that this document and all attachments [as noted above] were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering and evaluating the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I certify that I understand that the existence of a permit under [Article 6 of the Regulations] does not shield the source from potential enforcement of any regulation of the board governing the major NSR program and does not relieve the source of the responsibility to comply with any applicable provision of the major NSR regulations.

SIGNATURE: _____ DATE: 6/29/07

NAME: Kenneth Alexander

TITLE: VP Engineering Services REGISTRATION

COMPANY: Old Dominion Electric Cooperative NUMBER: 40989

References: Virginia Regulations for the Control and Abatement of Air Pollution (Regulations), 9 VAC 5-20-230B and 9 VAC 5-80-1140E. See reverse of this form for instructions.

COMMONWEALTH OF VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR PERMIT APPLICATION GENERAL INFORMATION

PERSON COMPLETING FORM	DATE	REGISTRATION NUMBER
Mr. Dahlgren Vaughan	6/29/07	40989

REASON(S) FOR SUBMISSION (Check all that apply):

☐ **STATE OPERATING PERMIT** — THIS PERMIT IS APPLIED FOR PURSUANT TO PROVISIONS OF THE VIRGINIA ADMINISTRATIVE CODE, 9 VAC 5 Chapter 80, Article 5 (SOP)

☐ **NEW (Greenfield) SOURCE**

☐ **MODIFICATION of a SOURCE**

☐ **RELOCATION of a SOURCE**

THIS PERMIT IS APPLIED FOR PURSUANT TO THE FOLLOWING PROVISION(S) OF THE VIRGINIA ADMINISTRATIVE CODE:

- ☐ 9 VAC 5 Chapter 80, Art. 6 (MINOR SOURCES)
- ☐ 9 VAC 5 Chapter 80, Art. 8 (PSD MAJOR SOURCES)
- ☐ 9 VAC 5 Chapter 80, Art. 9 (NON-ATTAINMENT MAJOR SOURCES)

☐ **Non-Binding Letter of EXEMPTION**

☐ **AMENDMENT to a Permit dated:** _____ **Permit type:** ☐ SOP(Art.5) ☐ NSR (Art.6)

Amendment Type:

- ☐ **Administrative Amendment**
- ☐ **Minor Amendment**
- ☐ **Significant Amendment**

THIS AMENDMENT IS REQUESTED PURSUANT TO THE PROVISIONS OF:

- ☐ 9 VAC 5-80-970 (SOP Adm.)
- ☐ 9 VAC 5-80-980 (SOP Minor)
- ☐ 9 VAC 5-80-990 (SOP Sig.)
- ☐ 9 VAC 5-80-1270 (NSR Adm.)
- ☐ 9 VAC 5-80-1280 (NSR Minor)
- ☐ 9 VAC 5-80-1290 (NSR. Sig.)

Complete Pages 1, 2, and 3 and refer to the above checked provisions for additional information requirements. Form 7 pages may be used to satisfy those requirements.

☐ **Notification of Change in Ownership - Effective Date:** _____

☐ **Notification of Facility Name Change - Effective Date:** _____

☐ **Notification of Owner Name Change - Effective Date:** _____

☒ **Other (Specify):** CAIR Application Form

COMPANY AND DIVISION NAME:
Old Dominion Electric Cooperative – Louisa Generation Facility

MAILING ADDRESS:
4201 Dominion Boulevard, P.O. Box 2310, Glen Allen, VA 23060

TELEPHONE NUMBER:	NUMBER OF EMPLOYEES AT SITE:	PROPERTY AREA AT SITE:
(540) 661-5600		

EXACT SOURCE LOCATION - INCLUDE NAME OF CITY (COUNTY) AND FULL STREET ADDRESS OR DIRECTIONS:
3352 Klockner Road, P.O. Box 760, Gordonsville, VA 22942

PERSON TO CONTACT ON AIR POLLUTION MATTERS - NAME AND TITLE:	PHONE NUMBER: (804) 968-4045
Mr. David Smith	FAX NUMBER: (804) 968-4010
Director Environmental, Health & Safety Services	E-MAIL ADDRESS: dsmith@odec.com

☒ Please check here if you obtained this form from the DEQ website.

FOR OFFICIAL USE ONLY

COUNTY CODE:	PLANT ID NUMBER:	LAT/LONG:

COMPANY NAME	DATE	REGISTRATION NUMBER
Old Dominion Electric Cooperative - Louisa	6/29/07	40989

FOR PORTABLE PLANTS:

IS THIS FACILITY DESIGNED TO BE PORTABLE? [ ] YES [X] NO

- IF YES, IS THIS FACILITY ALREADY PERMITTED AS A PORTABLE PLANT? [ ] YES [ ] NO PERMIT DATE: _____

IF NOT PERMITTED, IS THIS AN APPLICATION TO BE PERMITTED AS A PORTABLE PLANT? [ ] YES [ ] NO

IF PERMITTED AS A PORTABLE FACILITY, IS THIS A NOTIFICATION OF RELOCATION? [ ] YES [ ] NO

- DESCRIBE THE NEW LOCATION OR ADDRESS (INCLUDE A SITE MAP): _____

- WILL THE PORTABLE FACILITY BE CO-LOCATED WITH ANOTHER SOURCE? [ ] YES [ ] NO REG. NO.: _____
- WILL THE PORTABLE FACILITY BE MODIFIED OR RECONSTRUCTED AS A RESULT OF THE RELOCATION? [ ] YES [ ] NO
- WILL THERE BE ANY NEW EMISSIONS OTHER THAN THOSE ASSOCIATED WITH THE RELOCATION? [ ] YES [ ] NO
- IS THE FACILITY SUITABLE FOR THE AREA TO WHICH IT WILL BE LOCATED? (ATTACH DOCUMENTATION.) [ ] YES [ ] NO

DESCRIBE THE PRODUCTS MANUFACTURED AND/OR SERVICES PERFORMED AT THIS FACILITY:

Generation of electricity for sale.

LIST THE STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODE(S) FOR THE FACILITY:

4911

LIST THE NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS) CODE(S) FOR THE FACILITY:

221112

PLEASE LIST ALL THE FACILITIES IN VIRGINIA UNDER COMMON OWNERSHIP OR CONTROL BY THE OWNER OF THIS FACILITY:

Louisa Generation Facility
Marsh Run Generation Facility
50% Ownership in Clover Power Station
11.6% Ownership in North Anna Nuclear Power Station
50% Ownership in Regional Headquarters, Inc. (Office Building)

MILESTONES. This section is to be completed if the permit application includes a new emissions unit or modification to existing operations.

MILESTONES*	STARTING DATE	ESTIMATED COMPLETION DATE
New equipment installation		
Modification of existing process or		
Start-up dates		

*For new or modified installations to be constructed in phased schedule, give construction/installation starting and completion date for each phase.

Reports and Queries
Certificate of Representation
06/28/2007

Facility Information

Facility ID (ORISPL):	7837	**Facility Name:**	Louisa Generation Facility	**State:**	VA	**Tribal Land:**	
County:	Louisa	**EPA AIRS ID:**	5110900050	**Latitude:**	38.1181	**Longitude:**	-78.2139

Facility Detail (Mini Detail)

Representative Information

Name: David N Smith
Company: Old Dominion Electric Cooperative
Title: Director, Environmental
Address: 4201 Dominion Boulevard

City: Glen Allen **State:** VA **Zip:** 23060
Phone: (804) 968-4011 **Fax:** (804) 747-3742
Email: dsmith@odec.com

Name: Alvin D Vaughan
Company: Old Dominion Electric Cooperative
Title: Environmental, Health & Safety Coor
Address: 4201 Dominion Boulevard

City: Glen Allen **State:** VA **Zip:** 23060

Phone: (804) 968-7149 **Fax:** (804) 968-4010

Email: dvaughan@odec.com

People Detail Layout (Multiple)

Current Representatives

Program	Primary Representative, Effective Date	Alternate Representative, Effective Date	Primary Representative, End Date	Alternate Representative, End Date
ARP	David N Smith, 04/20/2001	Alvin D Vaughan, 10/12/2004		
CAIRNOX	David N Smith, 12/19/2006	Alvin D Vaughan, 12/20/2006		
CAIROS	David N Smith, 12/19/2006	Alvin D Vaughan, 12/20/2006		
CAIRSO2	David N Smith, 12/19/2006	Alvin D Vaughan, 12/20/2006		
NBP	David N Smith, 03/26/2003	Alvin D Vaughan, 10/12/2004		

Basic Table Layout

Units

Unit ID	Program	Unit Classification	Operating Status	Unit Type	Source Category	NAICS Code	Commence Operation Date	Commence Operation Date Code	Comm. Commercial Operation Date	Commence Commericial Operation Date Code	Unit Monitor Certification Begin Date
EU1	ARP	Phase 2	Operating	CT	Electric Utility	Fossil fuel electric power generation	03/19/2003	A	05/21/2003	A	05/21/2003
EU1	CAIRNOX	Affected	Operating	CT	Electric Utility	Fossil fuel electric power generation	03/19/2003	A	05/21/2003	A	01/01/2008
EU1	CAIROS	Affected	Operating	CT	Electric Utility	Fossil fuel electric power generation	03/19/2003	A	05/21/2003	A	05/01/2008
EU1	CAIRSO2	Affected	Operating	CT	Electric	Fossil fuel	03/19/2003	A	05/21/2003	A	01/01/2009

					Utility	electric power generation					
EU1	NBP	Affected	Operating	CT	Electric Utility	Fossil fuel electric power generation	03/19/2003	A	05/21/2003	A	05/01/2003
EU2	ARP	Phase 2	Operating	CT	Electric Utility	Fossil fuel electric power generation	03/17/2003	A	03/17/2003	A	03/17/2003
EU2	CAIRNOX	Affected	Operating	CT	Electric Utility	Fossil fuel electric power generation	03/17/2003	A	03/17/2003	A	01/01/2008
EU2	CAIROS	Affected	Operating	CT	Electric Utility	Fossil fuel electric power generation	03/17/2003	A	03/17/2003	A	05/01/2008
EU2	CAIRSO2	Affected	Operating	CT	Electric Utility	Fossil fuel electric power generation	03/17/2003	A	03/17/2003	A	01/01/2009
EU2	NBP	Affected	Operating	CT	Electric Utility	Fossil fuel electric power generation	03/17/2003	A	03/17/2003	A	05/01/2003
EU3	ARP	Phase 2	Operating	CT	Electric Utility	Fossil fuel electric power generation	04/01/2003	A	04/01/2003	A	04/01/2003
EU3	CAIRNOX	Affected	Operating	CT	Electric Utility	Fossil fuel electric power generation	04/01/2003	A	04/01/2003	A	01/01/2008
EU3	CAIROS	Affected	Operating	CT	Electric Utility	Fossil fuel electric power generation	04/01/2003	A	04/01/2003	A	05/01/2008
EU3	CAIRSO2	Affected	Operating	CT	Electric	Fossil fuel	04/01/2003	A	04/01/2003	A	01/01/2009

					Utility	electric power generation					
EU3	NBP	Affected	Operating	CT	Electric Utility	Fossil fuel electric power generation	04/01/2003	A	04/01/2003	A	05/01/2003
EU4	ARP	Phase 2	Operating	CT	Electric Utility	Fossil fuel electric power generation	04/15/2003	A	04/15/2003	A	04/15/2003
EU4	CAIRNOX	Affected	Operating	CT	Electric Utility	Fossil fuel electric power generation	04/15/2003	A	04/15/2003	A	01/01/2008
EU4	CAIROS	Affected	Operating	CT	Electric Utility	Fossil fuel electric power generation	04/15/2003	A	04/15/2003	A	05/01/2008
EU4	CAIRSO2	Affected	Operating	CT	Electric Utility	Fossil fuel electric power generation	04/15/2003	A	04/15/2003	A	01/01/2009
EU4	NBP	Affected	Operating	CT	Electric Utility	Fossil fuel electric power generation	04/15/2003	A	04/15/2003	A	05/01/2003
EU5	ARP	Phase 2	Operating	CT	Electric Utility	Fossil fuel electric power generation	06/26/2003	A	07/13/2003	A	07/13/2003
EU5	CAIRNOX	Affected	Operating	CT	Electric Utility	Fossil fuel electric power generation	06/26/2003	A	07/13/2003	A	01/01/2008
EU5	CAIROS	Affected	Operating	CT	Electric Utility	Fossil fuel electric power generation	06/26/2003	A	07/13/2003	A	05/01/2008
EU5	CAIRSO2	Affected	Operating	CT	Electric	Fossil fuel	06/26/2003	A	07/13/2003	A	01/01/2009

					Utility	electric power generation					
EU5	NBP	Affected	Operating	CT	Electric Utility	Fossil fuel electric power generation	06/26/2003	A	07/13/2003	A	06/26/2003

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Generator Information

Generator ID	Unit ID	ARP Nameplate Capacity	CAIR Nameplate Capacity	Effective Date
3	EU3	84.5	84.5	12/18/2006
5	EU5	171.1	171.1	12/18/2006
2	EU2	84.5	84.5	12/18/2006
1	EU1	84.5	84.5	12/18/2006
4	EU4	84.5	84.5	12/18/2006

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ATTACHMENT B

EPA Letters (3/28/03 & 7/9/04) per Citation for Condition 23

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

MAR 28 2003

Mr. David N. Smith
Environmental Compliance Manager
Old Dominion Electric Cooperative
Innsbrook Corporate Center
4201 Dominion Boulevard
Glen Allen, Virginia 23060

Dear Mr. Smith:

The Philadelphia Regional Office of the U.S. Environmental Protection Agency (EPA) has received and reviewed your request letter, dated February 27, 2003, seeking Agency approval for a custom fuel monitoring schedule under the New Source Performance Standard (NSPS) for Stationary Gas Turbines (40 CFR Part 60, Subpart GG) at the Louisa and Marsh Run Generation facilities in Louisa and Fauquier Counties, respectively, in Virginia. The Louisa facility is comprised of four (4) General Electric Frame 7EA turbines and one (1) General Electric Frame 7FA combustion turbine while the Marsh Run facility is comprised of four (4) General Electric Frame 7FA turbines. Subpart GG, under 40 CFR Section 60.334(b), requires the turbine fuel sulfur and nitrogen content to be monitored on a daily basis if the fuel does not have intermediate bulk storage. The Rule does allow for the development and approval of a custom fuel monitoring schedule based on the design and operation of the affected facility and the characteristics of the fuel supply.

As described below, EPA approves your request for the proposed monitoring alternatives at these facilities.

Old Dominion Electric Cooperative is seeking a waiver of the nitrogen monitoring requirement for the pipeline quality natural gas fuel used at the Louisa and Marsh Run facilities. On August 14, 1987, EPA issued guidance for custom fuel monitoring. According to this guidance, nitrogen monitoring may be waived for pipeline quality natural gas, as there is no fuel-bound nitrogen and the free nitrogen does not contribute appreciably to NOx emissions. Therefore, based on the information provided by Old Dominion Electric Cooperative, EPA approves the waiver of daily fuel monitoring for nitrogen content for the pipeline quality natural gas used at the Louisa and Marsh Run facilities.

Old Dominion Electric Cooperative is also seeking an alternative monitoring schedule for natural gas sulfur content . Rather than monitoring fuel sulfur content on a daily basis, Old Dominion is proposing to monitor the sulfur content on a decreasing basis over time starting with a twice monthly frequency followed by a monthly frequency and then, finally, a once per quarter frequency . The August 14, 1987 national policy allows for this customized fuel monitoring schedule and EPA is, therefore, approving your request.

Finally, Old Dominion Electric Cooperative is also seeking to use the procedures in EPA's Acid Rain program (40 CFR Part 70) to prove that the natural gas fuel meets the pipeline-quality definition specifications. This has been approved by EPA in the past and is, hereby, approved in the current circumstance.

The above approvals do not waive the right of EPA or another regulating agency to require monitoring at any time for determining compliance. In addition, if the sulfur monitoring reveals a sulfur content in excess of that required by Subpart GG, Louisa and Marsh Run generation facilities could be required to change the monitoring program and may be subject to an enforcement action. Finally, the above approval is based on Federal regulations and provides the minimum conditions for compliance. The Commonwealth of Virginia is delegated authority for the NSPS program and maintains the right to require more stringent requirements than those outlined above.

If you should have any comments or questions in regard to this matter, do not hesitate to contact James W. Hagedorn at (215) 814-2161.

Sincerely,

Judith M. Katz, Director
Air Protection Division

cc: James LaFratta, VADEQ
Greg Fried, OECA

#40989

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

Mr. David N. Smith
Environmental Compliance Manager
Old Dominion Electric Cooperative
Innsbrook Corporate Center
4201 Dominion Boulevard
Glen Allen, Virginia 23060

Dear Mr. Smith:

The U.S. Environmental Protection Agency (EPA) Region III has received and reviewed your request letter, dated June 23, 2004, seeking Agency approval for an alternative fuel quality monitoring schedule for your gas turbines as provided for under the New Source Performance Standard (NSPS) program General Provisions requirements. Specifically, 40 CFR Part 60, Section 60.13(i)(2) allows EPA to approve reduced monitoring for emission sources that are infrequently operated. Based on your recent communication, Old Dominion Electric Cooperative (ODEC) is seeking an alternative fuel quality monitoring schedule for the pipeline-quality natural gas fuel burned in the turbines for the Louisa and Marsh Run Generation facilities in Louisa and Fauquier Counties, respectively, in Virginia. The NSPS required schedule under Subpart GG specifies daily monitoring of fuel sulfur and nitrogen content but this amount of monitoring for natural gas is not warranted in this instance. Therefore, a reduced amount of monitoring is acceptable to EPA for the Louisa and Marsh Run facilities. These turbines are a simple cycle design and used only for peaking purposes when the demand for electric power is at its highest (hottest and coldest days of the year) based on our current understanding of the situation.

After reviewing ODEC's submitted fuel quality data, turbine capacity factor and usage information and other information, EPA had already approved of a custom fuel monitoring schedule for the referenced turbines and EPA is now clarifying the schedule to call for all gas sampling and testing to only be performed during periods where the turbines are actually operating.

If you should have any comments or questions in regard to this matter, do not hesitate to contact Mr. James W. Hagedorn, of the Air Protection Division, at (215) 814-2161.

Sincerely,

Judith M. Katz, Director
Air Protection Division

Event	Date	Initials
Coded	7-12-04	JWH
Scanned		
QC		

cc: Jim LaFratta, VaDEQ-Fredericksburg Office